Calcutta
April, 1925.
A. J. Masterman

Date Due

~~MAR 12~~ 1960 C W			
~~DEC 4~~ 1960 G P			
~~MAR~~ 5 1961 J R			
MA			
~~MAY 5 1961 J R~~			
JUN ~~19~~ 1965 M P			
~~MAY 2 3 1973 P~~			
DEC ~~12 1974~~ E U			
N 7 1994			

PRINTED IN U. S. A. CAT. NO. 23233

THE WORK OF WALL STREET

THE WORK OF WALL STREET

AN ACCOUNT OF THE FUNCTIONS, METHODS AND HISTORY OF THE NEW YORK MONEY AND STOCK MARKETS

BY

SERENO S. PRATT

SOMETIME EDITOR OF "THE WALL STREET JOURNAL"; LATE SECRETARY OF THE CHAMBER OF COMMERCE OF THE STATE OF NEW YORK

THIRD EDITION, REVISED AND ENLARGED BY

JOHN FRANKLIN CROWELL, PH.D., LL.D.

SOMETIME PROFESSOR OF ECONOMICS IN SMITH COLLEGE; FORMERLY ASSOCIATE EDITOR OF "THE WALL STREET JOURNAL," ETC.

D. APPLETON AND COMPANY

NEW YORK LONDON

1923

PRINTED IN THE UNITED STATES OF AMERICA

PREFACE TO THE SECOND EDITION

So vast are the transactions of Wall Street, so tremendous are the interests which it serves, so fundamental to the well being and prosperity of the whole world are the operations of its systems of credit and securities, and so varied and intricate are the problems involved in the activities of a great international money market, that to attempt to put within a volume of moderate size an adequate account of its work, and of the principles which underlie, and the spirit which inspires, that work, is an undertaking of large proportions. The author hopes, however, that he has, in good measure, achieved success.

The writing of "The Work of Wall Street" means something more than a description of the speculative market. The Stock Exchange is, indeed, an important part of Wall Street, but it is not Wall Street. The financial district includes, but is not embraced by, the stock market. The Clearing-house, far more than the Stock Exchange, is the heart of Wall Street. A description of the work of Wall Street is really an account of the mighty economic forces by which the commerce and industry of the richest and most powerful nation of the globe are carried on. A commercial country without a central money market would be like a government without a capital. The greatness of Wall Street is a visible proof of the greatness of the United States. The work of Wall Street is the work of facilitating, energizing, moving, expanding and safeguarding the work of the country.

Since "The Work of Wall Street" was first published in January, 1903, many changes have taken place in the

structure of the financial center—changes so important that a thorough revision has required the making of what is practically a new book, in matter and form, although as much of the old is retained as has been unaffected by the passage of time.

The three most notable changes in the machinery by which Wall Street performs its work have been:

1. The strengthening of the Bank Clearing House by the admission of the principal trust companies as members; by the establishment of a system of examinations by which the Clearing-house is enabled to maintain the banking position more securely; and by the widening of the scope of the bank statement and the improvement in its form.

2. The amendment of the rules of the New York Stock Exchange, by which improvements have been instituted in the organization of the stock market without destroying its facilities for effective distribution of the securities of the country and the better mobilization of capital; one of the most noteworthy of these improvements being the abolition of the Unlisted Department; and

3. An expansion, through both governmental action and individual initiative, of that publicity which is the surest safeguard of investor and speculator, and the strongest preventive of the evils of deceitful manipulation and dishonest promotion.

Moreover much financial history has been made in the past ten years; and what amounts almost to a revolution in business so far as its relation to government is concerned, is in progress. The question is being fought out with Wall Street as a battlefield, whether the business of the country shall be conducted on a competitive basis, or whether modern coöperation on a big scale shall be permitted, or whether it is possible so to combine competition and coöperation as to obtain their largest effi-

ciency, without the peril of economic anarchy on the one hand or financial tyranny on the other.

By the decisions of the courts, by the investigations of expert commissions, and by the studies of publicists and economists, new light has been thrown upon the theory and practice of money and banking, and of promotion and business organization.

The Monetary Commission, of which ex-Senator Aldrich is Chairman, has drafted a plan of monetary reform which, if adopted, will take rank with the most notable constructive financial achievements in the history of this country since the genius of Alexander Hamilton organized the Treasury and established the first United States Bank. The publications of the Commission alone constitute a most important contribution to the literature of money, banking and investment, and are of enormous value in educating public opinion as to the inestimable benefits of modern credit, properly organized and safeguarded.

Scarcely less valuable than the work of the Monetary Commission is the report of the Railroad Securities Commission, appointed by President Taft, of which Dr. Hadley, President of Yale University, was Chairman, and which presents, with clearness and scientific precision, the principles that should govern the issuance of railroad securities.

The investigation in 1909 of speculation in securities and commodities by a commission appointed by Governor (now Justice) Hughes, and headed by Horace White, has served at once to demonstrate the economic value of speculation and to correct many defects in the machinery of the speculative markets.

A number of decisions, notably those by the United States Supreme Court in the interpretation of the Sherman Anti-Trust Law, have profoundly affected the organization and conduct of big business.

In addition to these great changes, the past ten years have witnessed in this country a notable development of the investment market and a corresponding development of facilities for supplying the needs of investors. The science of investment is better understood, and the art of investing as practiced by capitalists, both large and small, is much more intelligent and discriminating; while the high class bond houses by their methods of publicity and distribution are making more distinct the line marking the separation between the true and the false, the sound and the bogus.

In the meantime the volume of speculation since the panic of 1907 has materially declined, which is attributed by some to the State tax on stock transfers, amounting to two dollars per 100 shares. This tax, imposed during the administration of Governor Higgins—because "the State needed the money,"—is uneconomic because it is a tax on sales, but it has proved a heavy revenue producer, though hurtful to the commission houses. The reduction in the volume of sales may be more properly attributable to the decline in gambling and manipulative transactions. Wall Street, however, has passed through other periods of speculative depression and then experienced a rapid revival, as for instance, after the panic of 1893.

In this connection attention should be called to the wonderful expansion in advertising in the past decade, and especially to what has been achieved in widening the scope, improving the quality, and strengthening the power of financial advertising. Some progress at least has been made in preventing this stupendous agency for the wise and wide distribution of investments from being seized by the hands of the sharks who are ever using the advertising columns for the purpose of swindling the innocents and the fools out of their savings.

In spite of the tremendous strain put upon capital and enterprise during the last ten years, we have as a nation made progress in material prosperity, for such are the vast resources of our country, that political and economic changes may retard growth, but cannot entirely stop growth.

In ten years the estimated wealth of the country has increased fully $20,000,000,000. Our money in circulation has increased a billion dollars. Our bank clearings and bank deposits have doubled.

When "The Work of Wall Street" was first published in January, 1903, it was practically a pioneer in its field. It was the first attempt to describe comprehensively the machinery with which Wall Street promotes the enterprise and facilitates the exchanges of the country and provides a regulated market for securities. In the preface of the first edition it was said that, while Wall Street filled a large space in the daily papers, this was chiefly in a sensational way; and there existed a remarkable degree of ignorance regarding the actual work of the financial district, while the history of speculation, and of its effects on the development of civilization had not been deeply studied. Ten years, however, have wrought a change.

Since the issue in 1903, there have been a number of publications, books, pamphlets and articles covering in part the same field as "The Work of Wall Street." The past ten years have been a time of popular education in the theories and practices of business, and there has been a notable output of books bearing upon various branches of the subject. Of the publications—books and magazine articles—relating directly to securities and Stock Exchanges, Professor S. S. Huebner of the University of Pennsylvania gave in the Annals of the American Academy (May, 1910) a list of 198; and a majority of these have been published since "The Work of Wall Street"

was issued in 1903. Moreover since Professor Huebner made his bibliography other publications have appeared which should be added to the list. In "The Work of Wall Street" the author makes reference to over one hundred books, reports and pamphlets on money, banking and speculation.

Instead, therefore, of there being a lack of information regarding the work of Wall Street, as was the case when the first edition was issued, there is now what might almost be described as a literature on the subject. This fact might be regarded as rendering unnecessary a revision of "The Work of Wall Street" were it not for two things. There are now so many publications, relating to various branches and aspects of the Wall Street system, that there is still a place left for a book, like this, which aims at giving a comprehensive but concise account of the whole mechanism in the light of the development of the past ten years, in order that the investigator may find, in one place, the essentials of a subject, which in some of its different parts may, perhaps, be found in larger detail in other publications. Moreover, "The Work of Wall Street," in spite of the fact that it was written ten years ago, still remains, according to Mr. F. W. Hirst of the London Economist, "the best description of the Wall Street system." Under such conditions it has seemed proper to continue its publication and to bring it up to date by discriminating revision.

In making this revision the author has believed that it was better to leave untouched that which has stood the test of ten years, and make only such alterations and additions as were rendered necessary by the actual changes in the system itself and by a larger view of the subject. This has required, however, the omission of much old matter, and much new writing, with the net result of materially increasing the size of the volume and making it

virtually a new book. The author has deemed it to be in the interest of the student to include, in its entirety, in this edition, the report of the Hughes Commission on speculation, to which he has added a number of notes of his own for the further enlightenment of the reader. The chapter on the Stock Exchange Clearing House, having received the approval of the Chairman of the Clearing House Committee when first published, is continued, unchanged except for a slight explanatory note.

New chapters on the function and the scope of Wall Street, on investment, speculation and gambling, and on reading the market, have also been introduced, and much new matter has been added in the chapters on "The Stock Company," "Listing of Securities," "The Stock Exchange," "The Credit Institutions and the Clearing House," "The Bank Statement and the Movement of Money," "The Investment Market," "The Curb Market," "Foreign Exchange and the Balance of Trade," and "Panics." In fact most of the book has been rewritten. Numerous citations from economic and financial authorities have been added, and most of the chapters conclude with a bibliography.

To Mr. James G. Cannon, President of The Fourth National Bank, a leading authority on commercial credits and Clearing Houses, the author owes the original inspiration for this book, as well as valuable assistance in the gathering of material. The author is also indebted to Mr. Maurice L. Muhleman, Secretary of the Hughes Commission, and formerly Deputy Assistant United States Treasurer, for important new matter in the chapter on "The Subtreasury" and also for further assistance. He desires likewise to make large acknowledgment of help to his friend and former colleague, Mr. Thomas F. Woodlock, once editor of *The Wall Street Journal*, but now member of the New York Stock Exchange.

In the revision moreover he has had the active assistance of his son, Mr. Thomas B. Pratt, of *The Wall Street Journal.*

The author himself has had for several years no connection whatever with the securities market, and in view of his other interests, he would not have undertaken a further description or analysis of its mechanism, if it had not been for the fact that he felt the responsibility resulting from his authorship of "The Work of Wall Street"; and as it had to be revised, he believed that it was his special duty to perform the labor.

Returning to his study of the Wall Street system, after several years of absence, he finds that his outlook upon it as a friendly but discriminating critic is unchanged, and he repeats what he said in the preface to the first edition:

"The author has conceived his duty to be that of a reporter rather than of an editor. He has sought to present the facts as they are, leaving to others to inquire why they are not something very different. He has endeavored to maintain an impartial attitude toward Wall Street, neither seeking to defend it against just criticism nor joining in the too common assault upon it as a blot upon civilization. No one can study this theme with unbiased mind without being impressed with the indispensable place the stock market fills in modern business, of the great value of its manifold services to the world, and of the extraordinary efficiency of its mechanism."

Wall Street depends upon the country for its sustenance, but Wall Street is essential to national progress. Any attempt on the part of Wall Street to abridge the liberty or throttle the natural growth of the country, or any attempt on the part of the country in anger, revenge, or ignorant passion to destroy Wall Street would be

equally ruinous, for a house divided against itself cannot stand.

S. S. P.

Publishers' Note to the Third Edition

This revision of the late Sereno S. Pratt's "The Work of Wall Street," by his former friend and editorial associate in financial journalism, Dr. John Franklin Crowell, brings this valuable volume up to date in respect to the developments between 1912 and 1920, without sacrificing any of the historical setting based on the author's extended first-hand acquaintance with the Street. Practically all of the old chapters have been retained, and several new ones have been added, including one on "Wall Street and the Federal Reserve Bank," another on "Liquidations in Peace and War," and a final one on "Wall Street and the World Market." Much of the Hughes Commission report, formerly printed in an appendix, has been interwoven with the text in the chapter, "Criticisms of Wall Street." Numerous new topical paragraphs have been incorporated here and there, making, with the added chapters and the introduction of the new matter, easily the most comprehensive and complete survey of the field which the volume attempts to cover, that has ever been published.

CONTENTS

LIST OF ILLUSTRATIONS

CHAPTER I

EVOLUTION OF WALL STREET

Long indeed has been the evolution producing the sensitive and powerful mechanism of Wall Street, which has developed, naturally and inevitably, in response to human needs. The principal processes of the money market may be traced in their origin to the earliest times of which history makes record, and checks and bills of exchange had their beginning in ancient Rome, although banking in its modern sense may be said to date from the establishment of the Bank of England in 1649. "The deposit currency" by which business transactions are mostly carried on to-day is a still more modern development. Corporations also existed in Rome; but the limited liability stock company is a modern discovery, and, in connection with steam and electricity, it has constituted one of a trinity of inventions that has revolutionized the world's business. By its means the unit of commercial enterprise has expanded from the neighborhood, and even the State, to the dimensions of the continent; the number of individuals, who may unite in the conduct of an industry, from three or four partners to a group of 120,000 to 150,000 stockholders; and the size of a market from the limits of a single city to the scope of the world. The stock company has enormously increased the opportunity and the power of coöperation in business. The inestimable benefits of this coöperation are eagerly desired, while its power is feared; and thus the problem, of how best to

subject this power to adequate control without unwisely limiting its opportunities for good, constantly confronts us.

Origin of Stock Market.—Stock-certificates were a product of the seventeenth century. The first great modern company was the East India Company, which was incorporated in 1600. Soon after that the Hudson Bay Company sprang into existence. But it was not until the latter part of that century that the shares in these companies began to be actively traded in.

Stock speculation is therefore a development of modern business, although the taking of long risks in trade is as old as commerce itself; and Homer relates how after the combat of Hector and Ajax, the fleet arriving from Lemnos' strands discharged cargoes of wine, which were sold to the hosts of warriors in exchange for brass, iron, oxen, and slaves. This was truly a great speculation.

According to Macaulay, the term "stock-jobbers" was first used in England in 1688, and he gives an entertaining account of the beginnings of the English stock market at that time. A multitude of new companies, genuine and bogus, were organized, and an active speculation in their shares led to the first boom in industrials of which we have any account. In 1693 a play was produced satirizing stock-brokers. Shakespeare, years before, had used the word "broker" as many as six times, but not as referring to dealers in stocks. "Time bargains," "bulls," "bears," "puts," and other technical terms of speculation were first used at the end of the seventeenth century and at the beginning of the eighteenth. So large became the unorganized market for securities, that in 1697 Parliament enacted a law to check the evils of speculation, and provided a system of licenses for brokers. Three or four years later Daniel DeFoe, in one of his pamphlets, attacked stock-jobbing.

The First Stock Panics.—This early mania for stock-speculation reached its height at nearly the end of the first quarter of the eighteenth century, in the promotion of the South Sea Company in England and of John Law's Mississippi Company in France. The collapse of these two bubble companies caused the world's first great panics in 1720. Guizot, in his history, gives a short but interesting account of the career of John Law, and of the intense excitement created in Paris by his bold financial conceptions. It was found necessary to close the entrances to Quincampoix Street, where the Paris brokers had their headquarters, in order to put a stop to the feverish tumult arising from desperate speculation. So many immense fortunes were won and then lost at that time that this ditty was everywhere sung in the streets:

> On Monday I bought share on share;
> On Tuesday I was a millionaire;
> On Wednesday took a grand abode;
> On Thursday in my carriage rode;
> On Friday drove to the opera ball;
> On Saturday came to the paupers' hall.

Shortly after the failure of John Law the Paris Bourse was legally founded, in 1726, but the "Change de Paris," out of which it may be said to have sprung, had a history running back to 1304.[1]

The English Parliament passed an act to prevent stock-jobbing in 1734, and forty years later another act was passed to prevent short selling. For nearly a century the curb market existed in 'Change Alley in London, and on July 5, 1773, the London Stock Exchange was formed. Thus the complicated machinery of the money

[1] For further information consult E. Vidal on "History and Methods of the Paris Bourse." See also Guizot's "Popular History of France," Chapter LI, tr. Black.

and stock markets, the banks, the exchanges, and the processes of speculation are importations into Wall Street. This country has improved, has Americanized them, but did not originate them.

Beginnings of Wall Street.—Less than forty years after the organization of the London Stock Exchange a stock market began to develop in Wall Street. In the United States, as well as in England, a craze for speculation had sprung up after the long war of the American Revolution, especially in public lands and public debts.

The struggle for independence had strained the resources of the colonies to the utmost, and much suffering had been caused their people. But with the revival of commerce after the war better times set in. The first Congress, sitting in Federal Hall, on Wall Street, had issued bonds, called stock, to assume the war debts of the States, and about $80,000,000 of securities were thus offered to the public. Other stocks had also been issued. In December, 1781, the Bank of North America had been incorporated in Philadelphia. Less than three years later, in February, 1784, a meeting of merchants was held to establish the Bank of New York. Hamilton drew up the plan and constitution of this bank, the first to be founded in this city. Among the places at which subscriptions were received was the office of William Maxwell, No. 4 Wall Street. In 1791 Congress passed, and Washington signed, Hamilton's measure for the establishment of the first United States Bank.

Speculation in the securities thus created set in. Wall Street became a market for them. It is recorded that early in 1792 there was an office for the public sale of stocks at No. 22 Wall Street. A stock list of that year gives quotations of 6 per cent. United States stock, and of the shares of the United States Bank and the Bank of North America. A number of men engaged in the busi-

ness of buying and selling these stocks on commission. Their favorite meeting-place was near a buttonwood tree which stood in front of No. 68 Wall Street. In 1792 Leonard Bleeker and 23 other brokers, as a result of a meeting held at Corre's Hotel, entered into an agreement "solemnly promising and pledging" themselves "not to buy or sell any kind of public stock at a less rate than ¼ per cent. commission on the specie value." The date of this agreement was May 17. This was the earliest beginning of the Stock Exchange, although there was no regular organization until twenty-five years later. With this agreement may be said to have begun the history of Wall Street as the seat of the Stock Market.

The whole country then contained about as many inhabitants as Massachusetts has now. New York had a population of 33,000, and about 3,400 dwelling-houses. The settled part of the city did not extend above Chambers Street. Wall Street, so called from the old stockade, or wall, that protected the early Dutch city from the Indians, was in 1792 an important street. The City—afterward called the Federal—Hall had been erected there in 1699, on the present site of the Subtreasury, and here Washington had been inaugurated as President in 1789. Hamilton lived nearly opposite, not far from the corner of Broad Street. The lower part was even then given up to trade, but the upper part was a parade-ground of fashion, and many leading families had their residences there. Trinity Church then, as now, stood on Broadway facing Wall Street.

Organization of Chamber of Commerce.—As early as 1752 the merchants had a meeting-place, or Exchange, on Broad Street near Pearl. In 1768 the Chamber of Commerce was organized in the long room of Fraunce's Tavern, a building still standing; and it is of interest to note that questions of money engaged its earliest attention. In

1786 the Chamber protested in vain against the State issuing irredeemable paper money as legal tender. In 1794 the merchants established the Tontine Coffee-House on Wall Street, and this continued the center of the business life of New York until 1827. Here the stock-brokers met for some time.

The first financial machinery required by the new country was banks, and the first great lesson taught by these institutions, as has been well said, was punctuality. The value of time as an asset in business became more and more appreciated. The success of the Bank of New York led to the founding (1799) of the Bank of the Manhattan Company, in the starting of which Aaron Burr was largely instrumental. From 1792 to 1801 the number of banks increased from 3 to 23, with a total capital of $33,550,000. A few fire and marine insurance companies had also been organized. The supply of securities available for investment and speculation made therefore quite a stock market. The following advertisement, which appeared in the first issue of the *Evening Post,* November 16, 1801, gives an idea of the dimensions of this market:

PRICES OF STOCKS

6 per Cent. Funded Debt...........	98¾ per Cent.
3 per Cent...do....do.............	56½ *a* 57
8 per Cent. Loan..................	112½
6 per Cent. Navy Loan.............	par.

BANK STOCK

United States Bank................	143 *a* 143½ p. ct.
New York (dividend off)...........	131½
Manhattan.........................	132

INSURANCE SHARES

New York Insurance Co............	128 per cent
Columbian....ditto................	137 *a* 138
United........ditto...............	118 *a* 119

Bills of Exchange at 60 days sight

On London	100 *a* 101 per cent.
On Hamburgh	36 *a* 38 cts. p. mk. b.
On Amsterdam	40 cents per guilder.

E. BENJAMIN, *Stock and Exchange Broker*,
November 14. No. 50 Wall Street.

At this time all the banks and insurance companies but one, and the Chamber of Commerce, were located in Wall Street, then, as now, the financial center. As the banks were paying 15 to 18 per cent. dividends, there was no small demand for their stocks. With the growth of the country and the rapid settlement of what is now known as "the Middle West," which was then the frontier, new banks were created, and the speculation in their shares increased. The history of Wall Street from this time becomes practically the history of the agricultural, industrial, and commercial development of the United States.

Distress in 1812.—The banking capital of the country in 1812 was more than $70,000,000. In this year the second struggle with England began, and the long closing of the ports and the cost of the war caused much distress. The Government had difficulty in floating a war loan. The bankers held a meeting at the Manhattan Bank on August 22, and took measures for their protection. Thus, a hundred years ago, the bankers realized the importance of concerted action in financial crises. During this panic—the first of any importance from which Wall Street suffered—90 banks in different parts of the country failed. The war over, a new period of expansion set in. The charter of the first United States Bank having expired, the second bank of that name was incorporated in 1816, and for nearly a quarter of a century this institution virtually controlled the course of the markets.

Organization of the Stock Exchange.—Speculation in bank stocks had become so extensive that it was necessary to organize the stock market into an exchange, and in

1817 the brokers who, until then, had been working under the agreement of 1792, formed an association under the name of the New York Stock and Exchange Board. This was the second great addition to the mechanism of the financial markets, the first having been the banks. The members of the Board agreed not to give public information of the names of buyers and sellers of stocks. At this time the outstanding Government securities amounted to $123,000,000. State and city bonds had also been issued, and many new banks and insurance companies formed. In 1818 the records of the Exchange show that 29 different issues of securities were dealt in, including the stocks of 10 banks and 13 insurance companies, but notably United States Bank stock.

Steamboat and Canal Stocks.—A new era had now set in. In 1807 Robert Fulton succeeded in applying steam-power to navigation on the Hudson River. This achievement, together with the digging of canals, resulted in a wonderful extension of inland commerce. New companies were formed, and a further expansion of the stock-market took place. In New York alone, companies having a capital of $52,000,000 were organized in 1824. In the same year 624 new stock companies were incorporated in Great Britain. There was speculation in New York not only in stocks but in bonds, mines, and cotton. The mechanism of Wall Street had to be enlarged. In 1820 the constitution of the Stock Exchange was revised. Definite rates of commission for Government bonds, stocks, mortgage loans, and foreign and domestic exchange were adopted. A rule of the Exchange prohibited fictitious, or what are now called "wash," sales. In 1821, when the Morris Canal shares were offered to the public, they were subscribed for twenty times over. The newspapers began to devote considerable space to Wall Street. The *Daily Advertiser* of April 10, 1822, referring to the news just arrived by ship,

that the British 5s were to be reduced to 4 per cent., expressed regret that the price of our stocks should be regulated by the jobbers of 'Change Alley in London.

Commercial Supremacy of New York.—The completion of the Erie Canal in 1825 established the commercial supremacy of New York in the western hemisphere. Up to this time Philadelphia had been the chief market of the country. There, as has been seen, the first bank was organized in 1781. There were the headquarters of the all-powerful United States Bank, under the eventful presidency of the brilliant Nicholas Biddle. There also, very early in the nineteenth century, the first American Stock Exchange was formed, with Matthew McConnell as president, in the old Merchants' Coffee-House. It is related that before the New York Exchange was established the brokers sent a delegation to Philadelphia to get a copy of the constitution of its Exchange, and information as to its methods of business. But New York soon forged to the front. Its population and commerce outstripped Philadelphia's, and the power of its banks and stock-market was felt in all the land. London bankers began to establish branch houses in Wall Street. In 1825 the still existing house of Brown Brothers & Company was formed there, as an offshoot of Alexander Brown & Sons of London. In 1837 the Rothschilds appointed August Belmont as their representative in New York, a connection their successors have maintained ever since.

Railroad Securities.—The Stock Exchange in 1827 moved into the Merchants' Exchange Building, which had just been erected on the site where the City Bank now stands. The city had then a population of nearly 200,000. There were 16 banks, and the local branch of the United States Bank occupied the building where is now the Assay Office. Two events occurred in 1829 of supreme importance to Wall Street. One was the inaugura-

tion of Jackson, who immediately began his memorable war on the United States Bank. The other was the application of steam to land transportation. The first train moved by a locomotive was operated in that year. By 1830 the railroad mileage became 30, and eleven years later it amounted to 3,361. Railroad stocks immediately became the object of speculation. In 1830 the first railroad stock—that of the Mohawk and Hudson—was put on the Stock Exchange list. Eight years later "Yankee rails," as they were called, were introduced into the London market, the first security of this kind to be traded in being the bonds of the Camden & Amboy Railroad. American stocks, however, had long before that time been speculated in in London. The official list, according to Charles Duguid, contained the names of about 60. The panic of 1837 ended the existence of most of them. A New York paper of August 3, 1835, printed, as news, the London quotations of 15 American stocks on June 23. Investment and speculation in railroad securities then led in Wall Street on down to 1913. In 1914-15 war industrials boomed speculation, so that in October, 1916, rails were 24.9 per cent. and in October, 1919, only 9.4 per cent. of total rail and industrial sales.

Panic of 1837.—The fierce struggle between Jackson and the United States Bank culminated in the panic of 1837. During the decade from 1830 to 1840, Wall Street was the scene of much excitement and turmoil. The speculation of that period was, in proportion to the resources of the country, as active as that of the present time. There were daring operators then as now. Jacob Barker, for instance, undertook in 1834 to insure the nonremoval of Government deposits from the United States Bank until Congress should meet. He demanded a premium of 25 per cent. A corner in Morris Canal and Bank stock in 1835 was the talk of the town. In July and August of

the same year 64,000 shares of the Harlem stock were sold for future delivery, although the actual issue of stock was only 7,000.

The newspapers now began to pay much attention to the transactions in Wall Street, and regular market reports appeared. On May 13, 1835, the *Herald,* then published at No. 20 Wall Street, contained the following:

Stocks—Yesterday the fancy stocks took a tumble of from 2 to 4 per cent. on some descriptions, the railroads especially. Money is beginning to get scarce, and there is some fear that the banks mean to curtail. This impression does not prevail generally.

SALES AT THE STOCK EXCHANGE

110	shares	East River Insurance	99
25	"	Manhattan Gas Company	129¾
50	"	" " " on time	100
150	"	Mohawk Railroad Company	126
500	"	Utica and Schenectady, opening	128
350	"	" " " "	128⅛
250	"	Jamaica Railroad	189
25	"	United States Bank	112¼
160	"	Union Bank	122
40	"	" "	121¾
100	"	Delaware and Hudson	112¼
450	"	" " "	112¼
200	"	" " "	112¼
310	"	Harlem Railroad	106
550	"	" "	105¼
100	"	" "	105¼
200	"	" "	105¼
51	"	Dry Dock Bank	150
50	"	" " "	149⅛

Six days later the same paper said:

A most active business is doing in stocks. The small bite of English news—the probability of stable government on the reform principles—has given additional confidence to our moneyed men.

The next week the same writer informs us:

Stocks went up generally yesterday 2 to 3 per cent. No cause is assigned. The chief of the Hebrew interest dipped deeply. It is said his deposits amounted to $500,000 a day—a second Rothschild,

truly. The bears' turn to-day. The United States Bank increased its loans nearly $2,000,000 during the month of April, whereat the *Washington Globe* lets off a large quantity of thunder. No one will complain at money being plenty, but when the day of payment comes it is almighty awful.

The sales of June 26 were "very large." They amounted to 7,875 shares. In Philadelphia, two days before, the transactions were 2,279. There were crowds in Wall Street then as now. On March 10, 1836, it was said that "Wall Street was impassable." During this year the Stock Exchange appointed a committee, composed of Messrs. Ward, Coit, Nevins, and Le Roy, to investigate the recent speculations in Harlem stock, and it was said by a financial writer of that day that "the system so much indulged in of late of time bargains and cornering will probably be sifted to the bottom. The recent operations in Morris Canal stock, the Harlem Railroad, and the Montauk Railroad have been a series of puzzles to the community, as much so as the roulette table or the faro bank to the uninitiated in gambling." The panic of 1837 struck Wall Street the preceding year, as on October 23, 1836, nearly a dozen failures were announced in the Street. The panic swept over the entire country, and was felt as severely in England as here. New York bankers, at a meeting May 9, resolved to suspend specie payments. From 1837 to 1839 there were 33,000 failures in the United States involving a loss of $440,000,000. Jackson triumphed in his contest with the United States Bank. This institution after its Federal charter expired, continued in business under a Pennsylvania charter, but finally, in 1841, passed out of existence altogether. Philip Hone, in his diary, says that the losses entailed by the failure of this bank equaled even those of the great fire of December 16, 1835, and he declared it meant "an utter destruction of American credit in Europe."

The *American* of November 25, 1841, gives the following account of the depreciation in prices:

To convey an idea of the immense amount of money sunk in stocks within the last three years, we give a list of a small portion only of those bought and sold at our stock board alone:

	Prices	
	Within 3 years past	Present
United States Bank	122½	4
Vicksburg Bank	89	5
Kentucky Bank	92	56
North American Trust	95	3
Farmers' Trust	113	30
American Trust	120	Nothing
Illinois State Bank	80	35
Morris Canal Bank	75	Nothing
Mohawk Railroad	76	60
Paterson Railroad	75	53
Harlem Railroad	74	18
Stonyton Railroad	70	23
Canton Company	54	23
Long Island Railroad	60	52

The great fire, to which allusion has been made, destroyed 648 buildings in the lower end of the city, including the Merchants' Exchange, in which the Stock Exchange had its Board-Room. The Exchange took up its quarters temporarily in Howard's Hotel, No. 8 Broad Street. The fire was followed by a general rebuilding, which transformed the appearance of the financial district. Former Mayor Philip Hone walked down Wall Street, July 13, 1842, and the same evening recorded his impressions in his diary, as follows:

The Subtreasury Building.—The splendid edifice fronting on Wall and Pine Streets is now entirely completed, and has been occupied

as the New York Custom House, in all its manifold and complicated departments, since the 1st of May. The building was commenced in May, 1834, and the edifice furnished with its furniture completed in May, 1842; cost, $985,000. The statement of the cost of this magnificent winding-sheet of departed commerce is taken from an elaborate and well-written description published in the *Commercial Advertiser* of this afternoon. A stranger walking down Wall Street from Broadway would laugh heartily at these lugubrious expressions of mine. With his back to "New Trinity," the most beautiful structure of stone in America, he passes the Custom House, which cost $1,000,000, eight or ten banks, each a palace for the worship of Mammon, and the Exchange with a portico of granite columns such as Sir Christopher Wren had no notion of. These, with the brokers' offices and the seats of money-changers, some of which cost enormous sums, would convey to the mind of the wayfaring man an image wholly different from that of commercial distress and pecuniary embarrassment.

"New Trinity," of which Mr. Hone speaks, has become "Old Trinity." The "New Custom House" is now the Subtreasury. The Merchants' Exchange, which later became the home of the Custom House, has now been completely transformed into the City Bank, and the seat of customs is removed to the great building at Bowling Green.

New Birth of Wall Street.—Mr. Hone's expressions were indeed lugubrious; and posterity, which would not think of laughing at him, laughs at them. For, even as Mr. Hone wrote, the new birth of Wall Street had taken place. Through the labor of panic and the baptism of fire, it was now rapidly growing into the stature and character of to-day. Wall Street soon became no longer a mere street. Its name covered a district. The business of the stock and money markets began to overflow Wall into Broad, New, and other neighboring streets. The fall of the United States Bank had brought to an end all pretensions of Philadelphia to supremacy in the financial markets. In the convention of bankers held in April,

1838, to consider the business situation, the New York bankers displayed the greatest spirit and courage. The convention decided to resume specie payments the following January, but the New York banks resumed May 16. "New York," says Prof. W. G. Sumner, writing of this time, "adopted the policy of severe contraction, prompt liquidation, and speedy recommencement. Philadelphia adopted that of relaxation, indulgence, delay, and prolonged liquidation." It was in 1838 also that the State of New York abolished the practice of special charters for banks, which had given rise to so many scandals and abuses, and adopted its admirable free banking law, that became the model on which, nearly a generation later, the National Banking Act was drafted. The *Evening Post* of April 18, 1838, said in an editorial, that this law "puts up a barrier against the practice of banking by special charters which we trust will never be removed." From this time the financial supremacy of Wall Street, in this country, has never been shaken.

The Telegraph.—In 1842, Morse, who in 1835 invented a recording instrument, built a submarine cable from Governor's Island to the Battery. Two years later, in 1844, the first land telegraph line was constructed. Hardly any other event has added more to the influence of Wall Street. In this same year was formed the law firm of Charles E. Butler and William M. Evarts, which is historically notable as one of the first of the class of corporation law firms that have now become an indispensable part of the Street's machinery.

The Subtreasury System.—With the fall of the United States Bank (1836) and the insecurity of public deposits in state banks, the Government proceeded in 1846 to the establishment of the Subtreasury system mainly for the safer custody of public funds. The first Subtreasury was opened on Wall Street in 1846. From that date down to

1914 the system repeatedly prejudiced the money markets by locking up customs receipts, internal revenues and proceeds of public land sales, for excessive periods.

Bank Clearing-House.—In 1853 the Bank Clearing-House was organized, being first located at No. 14 Wall Street. This has increased the facilities of Wall Street and augmented its safeguards as has no other part of its mechanism. In the same year the Assay Office was established; and the Corn Exchange, the forerunner of the present Produce Exchange, was incorporated.

The discovery of gold in California and Australia increased the world's wealth so much that there was an immense expansion in investment and speculation. Railroad construction proceeded at a rapid rate; money poured into the banks, and the banks lent their credit to the promotion of new enterprises and new companies. Instead of "an utter destruction of American credit in England," it is computed that the amount of American stocks held abroad in 1852 represented a value of $261,000,000.

At this time the methods of the Stock Exchange were primitive as compared with those of to-day. Each member of the Board had his seat, and old cuts show that the wearing of tall hats was the fashion among brokers. Much business was transacted in the Exchange and on the curb. The *Bankers' Magazine* of November 24, 1856, reported that "the aggregate transactions during the past four weeks were exceedingly large, aggregating nearly one million shares." Now that is a day's trading.

Panic of 1857.—But overspeculation, following the enormous production of gold, and the abuses of credit in the promotion of new railroad and other companies, together with tariff disturbances, brought on the panic of 1857, which a writer of the period said "was an explosion without adequate cause or premonition." This was precipitated by the failure of the Ohio Life and Trust Com-

pany, a Cincinnati concern having a branch office in Wall Street. It had made large advances to Western railroads. A few men still active in Wall Street remember August 24, 1857, when this institution closed its doors. "The failure," said the *Herald* of that day, "took the Street by surprise. While the public were looking for collapses among railroad companies, they seemed to lose sight of banking institutions." Two days later the *Philadelphia Public Ledger* said: "The times are sadly out of joint, and the effects of a bad system are daily developing themselves. The banks have been carrying full sail, the country has been importing and individuals living far in advance of capital and production." The *New York Times* declared that "the New York Stock Exchange as at present managed is little more than an enormous gambling establishment," which reminds one of some of the indiscriminate attacks made on Wall Street at the present time. All the banks, except the Chemical, suspended specie payments October 14, but resumed two months later. Wall Street was shaken by the shock. From August 22 to October 13, Reading declined 40 per cent., Delaware & Hudson 40, Illinois Central bonds 48, Park Bank stock 44, American Exchange Bank 55½. The size of the stock market is shown by the sale of nearly 71,000 shares in one day.

During the Civil War.—During the whole period of the Civil War Wall Street was like a boiling lake of excited speculation. The financial situation became so strained that even before Lincoln's inauguration the bankers met at the Subtreasury and resolved to suspend specie payments. The first issue of Clearing-House loan certificates were made at this time, and from 1860 to 1864 a total of \$59,159,000 were issued, the largest amount outstanding at one time being \$21,960,000 in 1862. Before the war was opened the National debt was under \$65,000,000, but

in 1866 it amounted to $2,773,000,000. This enormous issue of bonds was floated for the most part in Wall Street, and this was the most extraordinary of all the legitimate achievements of the market. The credit of the country was so low that it was very difficult to float the first loan. The Chamber of Commerce issued an appeal to capitalists to invest in the bonds, and Secretary Chase visited the Street and conferred with bankers in the interests of the loan. In the course of the war the Legal-Tender Act was passed, and in 1863 the present National banking system was established—the first National bank being founded in June of that year. To the National Banking Act, which made New York a central reserve city where half the reserves of the banks in the rest of the country could be kept on deposit, Wall Street owes no small share of its present power. It has augmented vastly its financial resources.

At the outbreak of the war the Stock Board was still a close corporation, conducting its operations in secret. Quotations were carried by hand from office to office. Each member had a particular seat in the Board-Room; there were less than a hundred members in attendance, and on account of persistent blackballing it was hard to get elected to the membership. Speculation overflowed the regular Board. The curb market became very active. An unofficial adjunct to the Board was started in the next room, and there were extensive arbitrage dealings between them. The market opened on the Street at eight o'clock and continued all through the day downtown, and at night in the corridors of the Fifth Avenue Hotel, and at a later period at an evening exchange. As the war progressed the speculation grew, and the total sales from early morning until midnight were on an enormous scale. At this time the rate of commission was reduced from ¼ to ⅛ of 1 per cent. In 1865 the Exchange prohibited its members from

attending the uptown night exchange. Meanwhile so large was the trading, and so exclusive the regular Exchange, that in 1864 the Open Board of Brokers was organized, and continued in existence until 1869, when consolidation with the old Board took place, creating the present Stock Exchange with its admirable system of government and rules for the transaction of business.

Speculation in Gold.—Gold became the football of speculation. The first premium on gold was quoted in January, 1862, and it was immediately dealt in the same as stocks. The Government tried in vain to prohibit speculation in the metal. Speculation in gold was branded as unpatriotic, but to no purpose. Legislation was enacted by both the State and the United States in 1863 to prohibit the banks from lending money on gold or bills of exchange, and in 1864 Congress prohibited transactions in gold except for strictly cash delivery at the regular offices of those dealing in it. But restrictive measures served only to advance the premium and failed to stop speculation, and the laws were repealed. In 1864 the Gold Exchange was organized. The same year, to facilitate deliveries, the Bank of New York arranged for special gold deposits, checks on which became good deliveries for sales of gold. Three years later the Gold Exchange Bank was organized as the Clearing-House for gold transactions. The Gold Exchange continued until 1877. All speculation in gold ceased on the resumption of specie payments in 1879.

When it is remembered that the immense business transacted during the Civil War period was done without the stock-indicator, the telephone, the cable, and the Stock Clearing-House, there is good cause for astonishment. Stock-Exchange records of complete stock transactions go back only to 1875. Before that only sales on calls were reported. In 1868 the official sales on call at the two

Boards were 19,713,402 shares of stocks and $245,245,240 par value of bonds, but, according to a contemporary estimate, these sales only represented one-tenth of the total speculation of the Street, which therefore amounted to more than $20,000,000,000 a year. Comparing this with Exchange records of 1906, when its transactions in stocks and bonds were about $30,000,000,000,[2] it is seen that speculation a half century ago was exceedingly active. In 1919 transactions totaled $32,625,718,110.

Tickers and Telephones.—It was not until July, 1866, that Cyrus W. Field finally succeeded in his cable enterprise, and in the following month London prices began to be regularly received by cable in New York. Arbitrage transactions soon started. The next year the stock-indicator was adopted. Telephones were introduced in 1878. The Stock Clearing-House was established in 1892, this being undoubtedly the most important contribution to the mechanism of the Street since the organization of the Bank Clearing-House forty years earlier. It has expanded indefinitely the facilities of the stock market, including the Stock Clearing Corporation with a night clearing branch and a day clearing branch in 1920.

Modern Wall Street.—With the consolidation of the Stock Exchange and the Open Board of Brokers in 1869, we enter upon the history of Wall Street practically as it exists to-day. Although more than a half century has passed, thirteen of the present members of the Exchange were elected in or before that year. The purpose of this book is to describe the present rather than the past; but since it is necessary to know something of its history in order to understand the work of Wall Street, this sketch of the beginnings of its stock and money markets is given.

[2] These figures for 1906 represent the transactions of the New York Stock Exchange. Those on the Consolidated Stock Exchange and on the ''curb'' should be added to make the comparison complete.

But the events of these more remote years can only be touched upon lightly.

The theme is indeed a tempting one. The period is crowded with dramatic episodes. Mighty enterprises have been launched. Great deals have been planned. Enormous speculations have been carried on. Panics have convulsed the Street. Immense fortunes won and lost have startled the world. The period immediately after the Civil War was especially prolific in speculative sensations. The harvest of war was wild extravagance, looseness of morals in politics and business, base frauds, and crime. But this period was also a time of reconstruction. The country put its shoulder to the wheel of industry and there was a notable development of the national resources. In May, 1869, the first railroad train moved across the continent. The Atlantic and the Pacific were united by bonds of iron. The Transcontinental stocks then became the playthings of speculation.

The Gold Conspiracy.—It was in 1869 that the "Gold Conspiracy" took place, culminating in the convulsion of Black Friday, September 24, which was undoubtedly the most extraordinary day in Wall Street history. A committee of Congress, of which James A. Garfield was chairman, investigated this conspiracy, and its report and accompanying testimony constitute the best account of it. Jay Gould, arguing that an advance in the premium on gold would stimulate exports of wheat and thus benefit the farmer, believed that the Treasury would suspend its sales of gold, and this, in fact, was for a time the Treasury policy. Therefore he got up a bull pool in gold and advanced the premium from 132 to 144. Other members of the pool liquidated, leaving Gould and his partner, James Fisk, to carry on the deal. Gould was assisted by the Tenth National Bank, in which he had a large interest, and which overcertified his checks $7,500,000 in one day. Garfield

called this bank "A Manufactory of Certified Checks." There was a bold and wicked attempt to connect the Grant Administration with the conspiracy, but it did not succeed. The corner was broken by President Grant and Secretary Boutwell, who gave the order to sell gold. Boutwell's telegram, "Sell four millions gold and buy four millions bonds," completely shattered the corner. "No avalanche," it was said by a writer of the day, "ever swept with more terrible violence than did the news of this telegram into the Gold Room." The excitement rose to the highest point. Old operators lost their heads and rushed hatless and half-crazy through the streets, their eyes bloodshot, their brains on fire. New Street was so crowded with excited people that it was a dangerous spot to stand in. The price of gold, which that morning had risen to 162½, fell to 133. The Gold Exchange Bank could not clear the gold transactions, which amounted to $410,000,000. Clearances were suspended for a month, and dealings in gold for a week. Mr. Gould employed over fifty brokers in his operations. One of these was Albert Speyers, whose contracts, amounting to $37,000,000, were repudiated. Smith, Gould, Martin & Company refused to make out a clearance sheet, but one was made up for them by a committee of the Gold Exchange, which showed that they received $20,630,000 gold and delivered $7,500,000, leaving $13,130,000 to be paid for.

"The malign influence which Catiline wielded over the reckless and abandoned youth of Rome," said Garfield in his report, "finds a fitting parallel in the power which Fisk held in Wall Street, when, followed by the thugs of Erie and the debauchees of the opera, he swept into the Gold Room and defied both the Street and the Treasury."

It was Black Friday that inspired E. C. Stedman, the banker-poet of the Street, to write his much-quoted poem beginning:

Zounds! How the price went flashing through
Wall Street, William, Broad Street, New!
All the specie in all the land
Held in one Ring by a giant hand—
For millions now it was ready to pay
And throttle the Street on Hangman's day.

The Erie Wars.—The Erie wars provided for years the chief sensation of Wall Street. Erie, Northern Pacific, and Reading have indeed been the objects of more speculation, the cause of more flurries and panics, and the victims of more receiverships and reorganizations than almost the entire rest of the railroad list put together. The history of Erie, from the time Daniel Drew entered the directory of 1852, to the time when by main force Gould was driven from the Presidency in 1872, would make a volume of absorbing interest. Charles Francis Adams made it the theme of two brilliant magazine articles soon after the events happened. Drew was in control of the road until 1868. For years Commodore Vanderbilt, who had obtained control of the Harlem, the Hudson, and the New York Central Railroads, fought desperately with Drew in the legislature, the courts, and the stock market for the mastery of Erie. In 1868 Drew lost, but Vanderbilt did not gain, control. The road then passed into the hands of Gould, who for four years made it the plaything of his Wall Street operations.

Gould Regime.—Adams wrote: "Freebooters are not extinct. Gambling is a business now where formerly it was a disreputable excitement. Cheating at cards was always disgraceful. Transactions of a similar nature, under the euphemistic names of operating, cornering, and the like, are not so regarded." During these twenty years of poor Erie's history securities were issued by the bushel, legislative bribery was freely resorted to, law was made another name for plunder, legal pandemonium existed, the

courts ran riot. Injunctions and counter injunctions were issued. In the final uprising of the people that followed this period of rottenness in politics and business, two corrupt judges were driven from the bench. The Drew trick of issuing new stock and flooding the market with it, and then by various expedients preventing its transfer on the books, so as still to keep control of the property, was copied by Gould, a greater master of speculation than even he. "This," said Adams, "is the most extraordinary feat of financial legerdemain which history has yet recorded." The Stock Exchange finally made a rule requiring shares of companies to be registered, in order to prevent a repetition of this scandal, but Gould at first refused to comply with it, and Erie was for a time struck from the list. After Mr. Gould was driven from the Presidency under a revolt inspired chiefly by English stockholders, he was sued for $9,700,000, which it was claimed he had converted to his own use from the assets of the road. Mr. Gould was under arrest for a short time, and finally made his famous "restitution," turning over, besides some valuable real estate, securities nominally worth $6,000,000, but which, it was later related under oath to the Hepburn Railroad Committee, were not really worth over $200,000.

Panic of 1873.—General Grant said, in 1869, that he thought there was a "fictitiousness about the prosperity of the country," and he was right; but the collapse did not come until four years later. The panic of 1873 was precipitated by the failure of Jay Cooke,[3] the promoter of the Northern Pacific, and it caused the greatest distress throughout the country. Its severity in Wall Street is

[3] The night before his failure Mr. Cooke entertained President Grant at his house near Philadelphia. Unaware apparently of the peril of his situation, the next morning he drove the President to the railroad station and then went to his office, where he discovered that he was a bankrupt. The annals of American business may be searched in vain for a more dramatic personal incident than this.

shown by the fact that the Stock Exchange closed its doors for ten days, and that there were seventy-nine stock failures. A long period of stagnation succeeded, but in 1879 the memorable boom that followed the resumption of specie payments was in full swing, and was checked only by the assassination of Garfield in 1881.

Panic of 1884.—Wall Street suffered more from the panic of 1884, although its effects were to a considerable extent felt throughout the country. This started with the failure of Grant & Ward and the Marine Bank, due to the dishonesty of Ferdinand Ward, the partner of General Grant. These were followed a few days later by the suspension of the Metropolitan Bank and George I. Seney. A remarkable incident of this panic was the failure of A. S. Hatch, then President of the Stock Exchange. A special election to fill Mr. Hatch's place had to be held in the midst of the excitement, resulting in the selection of J. Edward Simmons, who piloted the Exchange through the ensuing months of severe strain.

In 1890 a world-wide blow to credit was caused by the suspension of the Barings, of London, a blow more disastrous even than that of the failure of Overend, Gurney & Co. in 1866. There was a year of prosperity in 1892, but the next year a great commercial panic set in as the result of the free silver agitation.

Panic of 1893.—In the stock market, the first notable event of 1893 was the collapse of the McLeod Reading Combination. This had been formed in 1892, and on the 11th of February of that year there had been a bull day in Reading which advanced to 65, with sales of 592,000 shares, the total transactions of all stocks reaching 1,446,915 shares, which for nearly seven years remained the "record" for one day's trading. But February 20, 1893, the combination went to pieces; Reading fell to 28⅛, and the day's sales amounted to 1,438,971 shares, of which

957,955 were Reading. On May 3 there was a heavy fall of stock prices, and the next day the collapse in Cordage caused three failures.

The events of the panic of 1893 do not call for recapitulation in detail here, though they should receive the earnest study of every investigator of financial history. For many months the Treasury was on the ragged edge of suspension of gold payments. The National debt had to be increased in order to buy gold. Europe dumped her heavy load of American securities on our market. Prices of all stocks collapsed like houses of cards. Thirteen stock-exchange houses suspended, and there were more than 15,000 commercial failures. Only the Clearing-House Loan Committee, composed of Frederick D. Tappen, E. H. Perkins, Jr., J. Edward Simmons, Henry W. Cannon, W. A. Nash and G. G. Williams, stood between the business of the country and universal bankruptcy. Wall Street never performed a more valuable service for the country.

Panic of 1895.—President Cleveland's so-called Venezuelan message produced the Wall Street upheaval of December, 1895. Still suffering from the strain of the silver problem, with heavy exports of gold, the continued depletion of the Treasury reserve, making necessary another bond issue, the market broke under the added burden of possibility of war with England, which happily was avoided.

The McKinley Boom.—The election of 1896, resulting in a victory for the gold standard, ended the four years of depression in business, and the five years of what is known as "the McKinley boom" began. Confidence was restored, the crops were bountiful, the gold production was unprecedented, and marvelous prosperity filled the land. Even the Trans-Missouri decision of March 22, 1897, which declared that railroad pooling was illegal, only temporarily checked the revival, although it afterwards

worked great changes in methods of railroad control, introducing "communities of interests," and holding or securities companies, with later still more important changes, the final results of which are not yet determined. The war with Spain, short and decisive, and bringing about the acquisition of the Philippines, actually augmented the boom; but in 1899 there was a reaction caused, first by ex-Governor Flower's sudden death, and later by the Boer War and the closing of the Transvaal mines. The passage of the Gold Standard Law of 1900 was the legitimate consequence of the verdict of the people rendered four years before, and which was confirmed by the re-election of McKinley. All previous records of bank clearings, stock and bond transactions, exports, manufactured products and volume of trade, were broken in 1901. The high-water mark both of Wall Street speculation and business prosperity was then reached. A strike of steel operators, a short corn crop, the contest for the control of the Northern Pacific, ending in the stock panic of May 9, and the assassination of McKinley, any one of which, under other and ordinary conditions, might have spelled National disaster, did not materially disturb business interests, and only partially reduced the volume of speculation.

America a World Power.—A new sense of power had come. New giants had appeared in the speculative arena during this boom—men of daring, of originality, and of that gift of vision which ever spells the highest success. An era of big things opened for Wall Street. Great industrial companies were formed. Practically every large business was incorporated. The billion-dollar steel corporation was organized. Ten million-dollar banks were created and later, twenty-five million-dollar banks. American capital began to show signs of eagerness for other worlds to conquer, and stretched its hands across the sea. Suddenly America had found herself a world power.

Big Business and the Government.—The term "Captains of Industry" was applied to the great leaders in this national advance. But unprecedented prosperity brought with it new perils and new problems. In 1903, another era opened in Wall Street history, a new national issue—that of the big corporations, railroad and industrial, in their relations to the government and the people—arose, with results as far-reaching as the preceding national issues of slavery, reconstruction and silver bimetallism. The beginning of the government suit to break up the railroad combination known as "the Northern Securities Company" may be said to have been the formal, visible opening of this era. The question of the measure and manner of the enforcement of the Sherman anti-trust law, the question of the degree of governmental regulation of railroad rates and railroad finances, the rapid extension of political control of business enterprise, commanded the attention of the country, and soon began to disturb the markets and interfere with the free play of capital. Wall Street, as the center of the money market, and as the financial headquarters of the larger corporations, inevitably came under attack; and the stock market naturally reflected the varying course of the struggle that ensued. The struggle involved not only necessary reforms in the administration of corporate business, but what was far more fundamental to the future development of the country, the degree of permissible coöperation in regulating and limiting competition, so as to reduce its wastes and provide for that centralization of administration deemed necessary for the peaceful development of home markets and the conquest of foreign markets. The effect of these domestic conditions was accentuated by a world-wide political and social unrest. An immense gold production, a universal uplift of prices advancing the cost of living, the development of an aggressive trade unionism

and a growth of socialism in different forms, were incidents of the period from 1903 to 1912, and they augmented the uncertainties and disorders. They impaired confidence and retarded business enterprise.

Panic of 1907.—Out of these developments sprang the panic of 1907, with all the familiar phenomena of bank suspensions, mercantile failures, industrial depression, and decline of the security markets. It was the leadership of J. Pierpont Morgan, aided by another Clearing-House Loan Committee, which prevented a complete financial collapse. The depression of 1908 was severe. Then from the effects of this panic there was a rapid recovery in 1909-10, followed by another period of reaction. The panic revealed again the need of a great central banking control. The Monetary Commission's work (1908-10) led to the Federal Reserve Act (1913) as a solution of our banking and currency problems. The panic also revealed some weakness in the machinery of the stock market, and a commission was appointed by Governor Hughes to study the Wall Street system of speculation in securities and commodities. The result of this investigation was two-fold: it led to the removal of certain abuses, and the improvement of certain methods; and at the same time it demonstrated the substantial integrity and the economic value of the stock market.

United States Supreme Court decisions in cases involving the enforcement of the Sherman Anti-Trust law compelled the dissolution of the Standard Oil and American Tobacco companies, and brought about a change in the conditions under which "big business" could be legally conducted. Notwithstanding the political agitation of problems affecting the conduct of this "big business," important developments took place in the railroad, the industrial, the banking and the investment fields during this period. There was further expansion in the size of banks

and trust companies, and the admission into the New York Clearing-House of the most of the leading trust companies doing a banking business was a notable strengthening of the financial structure. The brilliant plans of the ambitious Edward H. Harriman, although not fully realized at his death in 1909, produced some of the most remarkable and dramatic incidents of the decade, and contributed largely to the increased efficiency and strength of the American railways.

Personnel of the Street.—In the evolution of Wall Street some notice must be taken of persons. It would be pleasant, if space permitted, to retrace the footsteps of Alexander Hamilton in the Street, and note the stir made by the frequent visits of Nicholas Biddle. How delightful must have been those evenings spent by the bankers and brokers of ninety years ago in Baker's Hotel, in Wall near New Street, at the meetings of the social organization called "The House of Lords," of which Bernard Hart was President! Many an important deal was discussed and arranged there.

Across the broad stage of Wall Street has passed a long procession of notable men; men of achievement as well as men of destruction; men who have added to the wealth and happiness of the country, and men whose only claim to fame was the audacity of their operations. In 1820 Nathaniel Prime and John Ward appear to have been the most active Wall Street speculators. Jacob Barker, the early Rothschild of the market; Jacob Little, the first of the long line of "Napoleons of Wall Street," who made and lost nine fortunes, and was the first to invent the convertible bond trick; Simeon Draper, whose death in 1853 caused a flurry; Daniel Drew, the great speculative director; Commodore Vanderbilt, creator of the New York Central Railroad System; his son, William H. Vanderbilt, whose sudden death, while conferring with Robert Garrett,

caused much excitement in financial circles; Jay Gould, both builder and wrecker of values, at once bold and conservative, and at all times subtle, adroit, and able; James Fisk, whose sensational career had a sensational ending in his murder by Stokes; Russell Sage, for years the Street's largest individual money-lender, and a factor in corporations and speculations for half a century; David Dow, Cyrus W. Field, Horace F. Clark, William S. Woodward, Alexander Mitchell, William H. Marsten, Anthony W. Morse, Leonard Jerome, and William R. Travers, the wit of the Street; Henry Clews, the veteran, who has embodied his experiences of fifty years in two volumes of reminiscences; Jay Cooke, the first promoter of the Northern Pacific, who lived to see his dreams of its future greatness realized; Henry Villard, who completed the road by driving "the golden spike," and who organized the first big "Blind Pool"; George I. Seney, who promoted the "Nickel Plate," and astonished the Street with the way in which he watered its stock and succeeded in unloading the property on the Vanderbilts; Addison Cammack and Charles F. Woerishoffer, long the most noted bears of the stock market; Henry N. Smith, once partner, but later the rival and enemy of Gould; William Heath, who went down in Smith's failure; S. V. White, astronomer and lawyer as well as broker, and once the noted manipulator of Lackawanna; James R. Keene, who long held a unique place in the stock market as the skillful manager of colossal operations for himself and for syndicates; Francis L. Eames, President and historian of the Exchange, and founder of its Clearing-House; J. Edward Simmons, the only man who served as President of the Stock Exchange, the Bank Clearing-House and the Chamber of Commerce; W. R. Vermilye, Donald Mackay, and Washington E. Conner; F. D. Tappen, the banker who took the helm in time of panic and piloted the ship of finance through the storm

to a port of safety; R. P. Flower, the first leader in the McKinley boom; August Belmont, George J. Gould, W. K. Vanderbilt, George F. Baker, James Stillman, Henry W. Cannon, John D. Rockefeller, William Rockefeller, H. H. Rogers, E. H. Harriman, the so-called "Colossus of Roads"; Jacob H. Schiff, the noted Hebrew banker; James J. Hill, "empire builder"; A. Barton Hepburn, masterly in crises; and last, and perhaps the greatest, J. Pierpont Morgan, the only man who had ever carried to successful consummation a billion-dollar enterprise—these are some of the names that have made Wall Street famous.

More Recent Developments.—In the outer aspects of the Street the past few decades have left only the Subtreasury, with its noble statue of Washington, the old Custom House remodeled for the City Bank, and Trinity Church. In its later leadership there has been a vast development of international relations. Accompanying the outer changes of Wall Street there has been a like change in its inner life and spirit. A notable expansion and improvement in its facilities has taken place. The methods of the stock market have been modernized. Greater safeguards against reckless and dishonest speculation have been adopted. New barriers have been raised against the ravages of panic. Speculation is at once bolder and better protected. The banks have increased their capital, augmented their resources, and by coöperation are able to present a solid front against the approach of disaster.

Such an emergency came with the outbreak and course of the Great War of 1914-1918. In that crisis New York's leadership was demonstrated on a world-wide scale. This country became thereby for the first time a creditor power in the world's financing. The Stock Exchange, though closed for the first four months of that struggle, for the rest of the period was the main liquidating agency for the neutral or Allied world. In the stupendous financing ex-

ceeding $25,000,000,000 of Federal obligations the Street coöperated assiduously with the Government. Under the Aldrich-Vreeland Act the associated banks met the currency crisis by providing emergency currency, thereby saving the mercantile community from threatening bankruptcy, until the Federal Reserve system could safely take charge of the situation.

Stages of Market Evolution.—From this rapid review of the history of Wall Street, it is possible to trace the various stages in the evolution of its financial machinery.

First, men experienced the need, and discovered in the corporation the method, of coöperation in business. Next came the stock certificate, issued as evidence of partnership in the corporate enterprise. This afforded a new field for the investment of savings. As the demand for stocks increased, and new companies were formed, the certificates more and more became subject to purchase and sale. A market for securities thus developed. This was first on the street, but later it became necessary to organize it with by-laws and rules, and out of this the Stock Exchange grew. There were so many buyers and sellers of stocks for investment, that fluctuations in prices became frequent, which led a number of persons to speculate in future values. This speculation expanded so greatly that, while it performed a valuable service in aiding in the distribution of securities and in making capital more mobile, it developed abuses, and at times so overloaded the credit structure as to cause a collapse. With the rapid conversion of all forms of business into stock companies, and the equally rapid growth of the stock market, it was inevitable that the Stock Exchange should exist near the great banks and the Clearing-House, and that a big international market for credits and securities should develop in the leading commercial city of the country. It was inevitable also that there should be evolved

in this market a code of rules and of ethics to insure as high a degree as possible of fair play, publicity, and security; and these rules have advanced, and will continue to advance, in their requirements, as business becomes more and more a standardized profession. The history of the New York stock market, like the stock markets of London and Paris, Berlin and Vienna, is closely identified with the history of commerce and of public finance.

Finally the Street has come to recognize more clearly its responsibility as a monetary and speculative center to the rest of the country and to the larger world of international enterprise. With the advent of the United States into membership in the joint development of the resources of the more backward peoples Wall Street is gradually evolving not only adequate machinery but newer types of men capable of mastering the intricate problems of the World Market.

REFERENCES

Some of the Sources of Information Consulted in Addition to Old Records, Newspapers and Documents

''History of Currency in the United States,'' A. Barton Hepburn, 1903.
''Men and Mysteries of Wall Street,'' J. K. Medbury, 1876.
''Fifty Years in Wall Street,'' Henry Clews, 1908.
''Wall Street Point of View,'' Henry Clews, 1900.
''Story of the Stock Exchange'' (London), 1902.
''Ten Years in Wall Street,'' W. W. Fowler, 1870.
''Forty Years of American Finance,'' A. D. Noyes, 1909.
''History of the New York Stock Exchange,'' E. C. Stedman, 1904.
''Early History of Wall Street,'' O. G. Villard, 1897.
''The Stock Exchange From Within,'' Wm. C. Van Antwerp, with ''Report of the Hughes Commission'' as an Appendix, 1913.
''The Operation of the New Bank Act,'' Conway & Patterson, 1914.
''Financial History of the United States,'' Davis R. Dewey, 1903.
''Financial History of the United States,'' A. S. Bolles, 1884.
''Chapters of Erie and Other Essays,'' Charles F. and Henry Adams, 1886.

"The Old Merchants of New York," Walter Barrett, 1885.
"The American Commonwealth," James Bryce, 1891.
"A History of the Bank of New York," 1884.
Diary of Philip Hone, 1828-51.
"History of the City of New York," Mrs. Martha J. Lamb, 1877.
"A History of Banking in the United States," William G. Sumner, 1896.
"American Almanac," 1834-61.
Bankers' Magazine, 1846-1911.
"A Week in Wall Street," By One Who Knows, 1841.
"Life Story of J. Pierpont Morgan," Carl Hovey, 1911.
"International Finance" (London), Hartley Withers, 1916.
"The Federal Reserve Act," C. W. Barron, Part II, 1914.

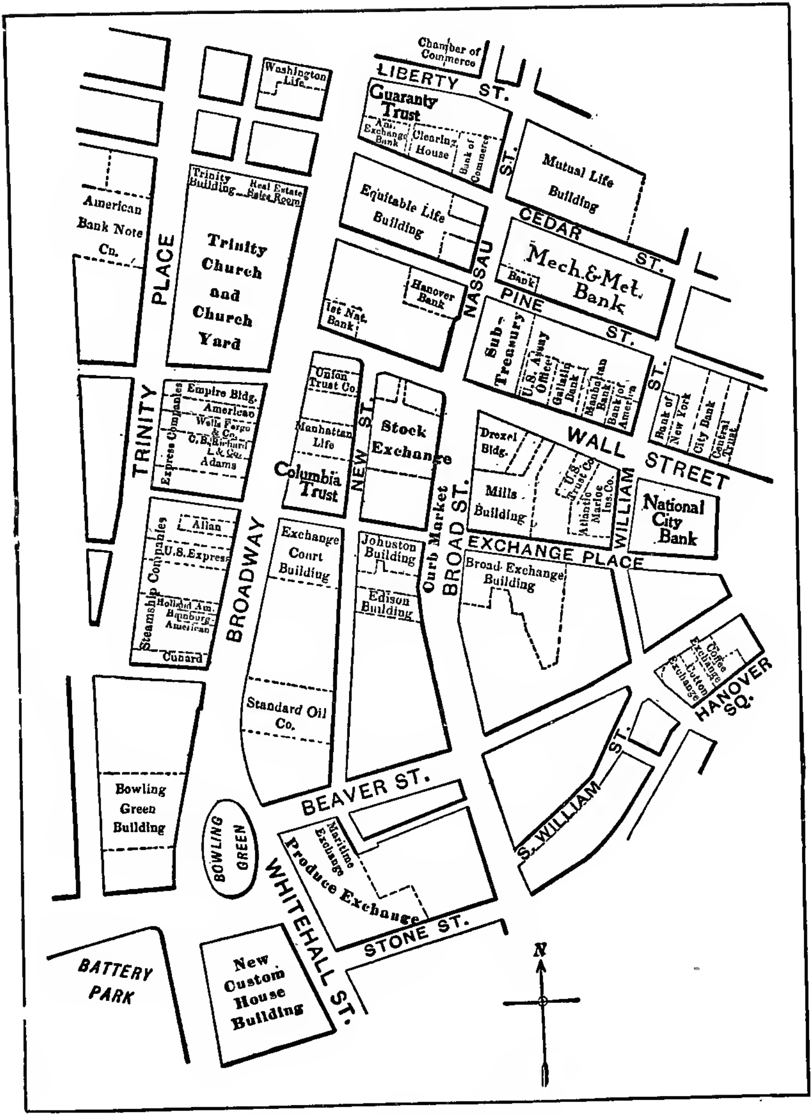
CHAPTER II

GENERAL VIEW OF WALL STREET

Wall Street is one of the shortest and one of the longest streets in the world. Geographically it extends from Broadway to the East River, mainly that part west of Pearl Street being occupied by banks, bankers and brokers. Financially, however, it completely girdles the globe. It is a national and international thoroughfare.

As most commonly used, the name applies to a certain section of the city where the banks and the exchanges and the offices of the corporations which depend upon them are located. The offices of the Trustees of Columbia University and of the excellent Seamen's Friend Society are in Wall Street, but are far less of it than are many institutions that are located far away,—as, for instance, the Chemical Bank, facing the City Hall, the general offices of the New York Central Railroad, at Forty-second Street, and the corridors of the Waldorf-Astoria Hotel, where the brokers and operators are wont to congregate in the evening, as in former years they assembled at the Fifth Avenue Hotel, and later at the Windsor.

"In Wall Street."—A man is said to be "in Wall Street" who is engaged in business directly connected with the great exchanges and banks, and the banking houses and corporations in close affiliation with them. The telegraph has vastly extended the boundaries of the financial district. The banks have close affiliations with other banks and with individuals and corporations in all parts of the country. The brokers maintain branch of-



Map of Wall Street District

fices, often with direct wire connections, in many cities and towns. A man living in Denver or Seattle may be more truly "in Wall Street" than a resident of Brooklyn or Harlem.

Draw a line east and west from river to river across Manhattan Island, along the line of Fulton Street, and the territory south of it comprises the financial district. The city is only three-quarters of a mile wide at Fulton Street, which is only half a mile from the Battery; yet within this narrow district is concentrated more wealth, probably, than in any other like area in the world. The Stock Exchange stands about in the center, on Broad, Wall and New Streets, with a half block facing on Wall Street. The Bank Clearing-House occupies a stately building on Cedar Street, between Broadway and Nassau Street. The Subtreasury stands on Wall at the corner of Nassau, facing Broad Street, and the Assay Office occupies the building adjoining on Wall. The Custom House, through which one-half of the commerce of the United States passes, long had its home in the old Merchants' Exchange building on Wall Street, corner of William, but now occupies a magnificent structure fronting Broadway at Bowling Green. Near the site of the new Custom House, at the corner of Beaver Street, stands the immense Produce Exchange building, occupying the ground where formerly was the first market of the old Dutch city. The Produce Exchange is devoted to transactions in grains and provisions. The Maritime Exchange, which, as its name implies, is the meeting place of ship brokers and others engaged in the shipping trade and of which representatives of steamship lines entering New York are members, formerly had offices in the Produce Exchange, but now has a home of its own in Broad Street. During the rebuilding of the Stock Exchange, the Stock Board for more than a year occupied a part of the big Exchange room of the Produce

Exchange. The Cotton Exchange, founded in 1870, and the largest institution of the kind in this country, has a fine building at Hanover Square, on the site where Bradford printed the first newspaper published in New York. Close to the Cotton Exchange stands the Coffee Exchange. Within the financial district, the metal trade and the real estate interests have organizations representing them. In the settlement of estates many investment securities are sold at auction in the Real Estate salesrooms. On the corner of Beaver and Broad Streets stands the Consolidated Stock Exchange, where formerly there was a heavy speculation in oil, but which now does a large business in stocks, mostly in lots smaller than those traded in at the Stock Exchange.

The sugar trade monopolizes a large part of the lower end of Wall Street. In Pearl Street is concentrated a section of the tobacco trade. The metal trade gathers around the Metal Exchange, the cotton trade in and around the Cotton Exchange, and the grain trade in and around the Produce Exchange. Many steamship and export companies are found on Broadway, below and above Wall Street. The fire and marine insurance companies center in Wall, Pine, Cedar, William and Maiden Lane. Several life insurance companies, including the two largest, whose combined assets amount to billions, are in this district. The Standard Oil Company has its headquarters in a building of its own in lower Broadway, and the Western Union Telegraph Company in a building at the corner of Dey Street.

In this financial district there are now no less than 90 banks, of which 21 are on Wall Street; 25 trust companies, of which 5 are on Wall Street; the general or principal fiscal offices of 130 railroad corporations; 57 life, 259 fire and marine, and 105 other insurance companies; 15 safe deposit companies; 20 cable and telegraph, and 190

steamship companies; over 150 coal, iron, steel, and copper companies; and several hundred large industrial, manufacturing, and other miscellaneous corporations. Every company whose securities are listed in the Stock Exchange has a transfer office within convenient distance of it. The brokers make their headquarters in the towering office buildings, those wonderful structures of steel, clothed in stone and marble, which have made the streets in the financial district a series of deep cañons. One of these buildings is said to contain more rooms than any other in the world and to house during the day over 13,000 persons. The private bankers, of course, have their elaborate establishments within this district. The house of J. P. Morgan & Company occupies its own building, at the corner of Wall and Broad Streets, which has the reputation of standing on the most valuable site per square foot of any real estate in New York. The curb market has been situated on Broad, just below Exchange Place, but has been obliged from time to time to shift its position.

The Chamber of Commerce.—The Chamber of Commerce of the State of New York, the oldest and most important institution of the kind in the world, occupies a stately building in Liberty Street, and its assembly hall, filled with portraits of leading merchants and bankers of former years, is one of the most beautiful in the country. No trading is carried on in the Chamber, and it is not a part of the credit, much less of the speculative, machinery of Wall Street. It is "the merchants' forum." Its special function is to promote and protect the interests of the commerce of the city and State; and its membership, while including bankers and brokers, is composed largely of merchants and manufacturers and officers of industrial and railroad corporations. But so closely is commerce bound up with the money and security markets by ties of mutual interest, the big merchants being directors in

banks and corporations and the bankers having, in many cases, an influential voice in the direction of the leading industrial and mercantile companies, that it is not easy to draw the line separating commerce from finance. This is not a thing to be deplored. It is the inevitable result of that community of interests which now unites the whole world of business. The Chamber of Commerce,[1] with its committees on Finance and Currency, Foreign Commerce and the Revenue Laws, Harbor and Shipping, Internal Trade and Improvements, Insurance, State and Municipal Taxation, Commercial Education, and Arbitration, has, since its organization in 1768, constantly labored for sound currency and banking laws, an equitable administration of the tariff, the extension of our foreign trade, the improvement of the harbor and terminal facilities, the maintenance of good insurance methods, the enacting of just tax laws, the encouragement of commercial education, the arbitration of mercantile disputes, the establishment of good municipal government, the promotion of world peace, the extension of philanthropy to different parts of the world suffering from great calamities, and the cultivation of that international hospitality which brings different nations and races closer together.

Those who look upon the financial district with suspicion and imagine that only selfishness and sordidness prevail there should examine these remarkable institutions, the Chamber of Commerce and the Clearing-House. They will discover high ethical standards, a lofty altruism, and an enlightened and earnest public spirit. Many

[1] In February, 1912, A. Barton Hepburn, President of the Chamber of Commerce and of the Clearing-House Association, said:

"The two most powerful influences in commercial and business affairs in this country are undoubtedly the New York Chamber of Commerce and the New York Clearing-House. We are located in close proximity, we serve practically the same community, and the same interests, and we are largely composed of the same membership in different form."

of the busiest men in the world give freely of their time (which is even more valuable than their money) in the performance of public duty on committees.

Wall Street is not only a clearing-house for credit and securities. It is also a clearing-house for art, for education, for philanthropy, and for religion, in all of which many of its leading men are deeply concerned, and its work in the promotion of these interests is scarcely less important to the country, than its work in its own special field of enterprise. The enemies of Wall Street insist upon judging it too much by its faults. In all fairness it should be credited with the immense services it performs.

A Study in Billions.—More than a century ago the volume of Wall Street's business was easily computed in thousands. Later its transactions were in millions. To-day any sketch of the work of Wall Street must necessarily be a study in billions. Even the sum of $50,000 paid out of the Treasury in 1792 by Hamilton was sufficient to afford some relief to the Street in a time of financial distress. It would be but a drop in the bucket to-day. In March, 1902, J. Pierpont Morgan, testifying in the Northern Securities case, spoke of a $10,000,000 deal as if it were a small matter.

Object alike of fascination and fear, Wall Street is the best known and least understood street in America; object of fascination, because of the glamor of the great fortunes made and lost there; object of fear, because of its wealth and power. It is as mysterious to the outsider as a Masonic Lodge is to one who has never passed through its ceremonies of initiation. Like Masonry, Wall Street has its code of morals, its ritual or forms of doing business, its working tools, and a strange language which only the initiated can understand. Moreover, no Masonic Lodge is ever tiled more closely than is Wall Street, where, notwithstanding its immense deposits of money and val-

uable securities, robbery is seldom attempted and still more rarely accomplished, so carefully is it policed.

It will be found that the nearer we get to the mysteries of Wall Street the less mysterious they appear. In truth, strange as may seem some of its terms and methods, nothing could be more direct or simple than the principles upon which it conducts its business.

Wall Street is to the United States what Chapel Court and Threadneedle, Throgmorton, and Lombard Streets are to England, the seats of the stock and money markets. So rich is this country, so extensive its territory and so immense and varied its resources, that Wall Street's power is now recognized the world over as coördinate with that of London. American manufacturers are competing for trade in every market. American capital is employing itself in Canada and South America, has invaded London and Rotterdam, and is gradually spreading itself over Europe and Asia. The time can not be far distant, therefore, when the securities of the world will be represented in the markets of Wall Street as they are now in London. "The debtor nation," said Secretary of State Hay in his McKinley memorial address, "has become the chief creditor nation. The financial center of the world, which required thousands of years to journey from the Euphrates to the Thames and the Seine, seems passing to the Hudson between daybreak and dark." "Before the war," a more recent study on this subject concludes, "we owed the world from $4,000,000,000 to $5,000,000,000 in foreign capital invested here. . . . Now we have a net total of capital invested abroad of about $12,000,000,000."[2]

Vastness and Conservatism.—Yet in spite of its greatness, there is a sense in which Wall Street is provincial. It has been said that "vastness is often the parent of nar-

[2] "The Future of Our Foreign Trade," F. A. Vanderlip and John H. Williams, 1920.

rowness.'' The narrowness of Wall Street has a basis of reality, but it is more apparent than real. The vast extent of its interests leads some Wall Street men to view with indifference, and sometimes with contempt, the interests that lie outside of it. To that extent its narrowness is real. But Wall Street seems to multitudes of people to be narrow simply because it is not in sympathy with radical ideas. Vast interests bring heavy responsibilities. Wall Street is a conservative force in the country; and while it is not opposed to an orderly advance, it serves as a check upon rapid progress in dangerous economic and political experiments.[3]

The Larger Wall Street.—Wall Street in the larger sense is the nation's main financial clearing-house within itself and with the rest of the world. In this rôle it has demonstrated its power during the past few years in such stupendous undertakings as floating war loans, assisting the Government in financing its readjustments from war to peace, and in promoting the policy of the nation in the rehabilitation of its merchant marine. Possibly there has never before been so enormous a commitment in so short a period of financial resources in the effort to enter upon our heritage as a world power, as was launched between 1914 and 1920 in government bond issues, in foreign banking investments and in maritime and exporting enterprises. And most of this was done by the direct participation of Wall Street.

[3] Speaking from my own experience in Wall Street, I have no hesitation in saying, first, that men as a rule speak the truth in Wall Street in speaking of that which they know, and, second, that there is wider dissemination of essential truth in Wall Street and a better general understanding of that truth, so far as facts and figures bearing upon securities are concerned, than there is in other commercial and industrial communities with respect to their characteristic products that are bought and sold. —THOMAS F. WOODLOCK.

CHAPTER III

FUNCTION OF WALL STREET

New York is the gateway of the Nation's Commerce, and Wall Street has been likened to a toll-gate to pass which every product of the country must pay tribute. As no one likes to pay toll, this would account for much of the animosity so often manifested against the financial center. Yet some one must make, maintain and operate the various agencies by which the products of the country reach the markets, and it is right that the service should be paid for.

Transportation.—Wall Street is the directing head of the great system of transportation, using that term in its broadest significance, as including not only the railroads and steamships, but also the banks and exchanges, and all the other manifold agencies by which the products of the soil are brought to the homes of consumers in forms fit for human use. Without the products the race would starve. Without the facilities by which the products are moved and fashioned and financed, the products would not reach those for whom they are intended, and civilization would perish. It has been said that the world is never much more than a day distant from starvation; and the operation by which production is brought to the door of consumption by human agencies is so marvelous in its speed, accuracy and power, as to seem almost as much a miracle as the operations of nature fixed by divine edict. Wall Street, in its financial machinery, facilitates the natural flow of money, provides the means for the pro-

motion of enterprises, safeguards and assists the movement of commerce, and maintains that system of credits by which a ten-fold power of service is given to every dollar.

Diffusion of Wealth.—By the machinery of its stock-market it promotes the diffusion of wealth; it makes possible for great capital to be accumulated for vast undertakings, governmental and private, too big for individual effort; it enables a multitude of small capitalists to become partners in these big enterprises, by its agencies for the distribution of securities from the hands of producers into the hands of investors as the ultimate consumers;[1] and it is able by its speculative machinery to anticipate human needs, and to secure a more even and equitable level of prices. For this work it must be paid, call it a fee if it be regarded as professional service, call it a toll if it is thought to liken Wall Street to a gate, or a tax if one prefers to speak of Wall Street as exercising legislative power, or a price if it is thought more proper to regard Wall Street as a merchant selling credit and securities for the most they will bring. But whether a fee, a toll, a tax, or a price, it can not be disputed that Wall Street earns a reward for an indispensable service.

There is a feeling that Wall Street has charged too much for its labor and that this excess charge constitutes an intolerable burden upon the business of the country.[2]

If this were true, in any large way, Wall Street could

[1] The fundamental function of the Exchanges is to give mobility to capital.—CHARLES A. CONANT.

[2] The Commissioner of Corporations, in his report (1911) on The United States Steel Corporation, charged that excessive profits were made by the underwriters who organized the company, in as much as, on a cash expenditure of $28,000,000, it made a net profit of $62,500,000, of which one-half went to the managers and the rest to the syndicate members. The liability of the underwriters is declared to have been "nominally" $200,000,000, but not really more than the sum actually advanced. On the other hand, the report attempts no real appraisement of the value of the expert service and influence given.

not exist. Wall Street has no monopoly of facilities. If it charges too much for its services, it has competitors to whom one may go. If it is inefficient or false to its trust, it must surely fall. Individual instances of graft, and other forms of corruption and manipulation and extortion, it would be easy to prove, for they can be found in plenty; but taken as a whole Wall Street performs its work with integrity and skill, and at a price regulated by the law of supply and demand. It is probable that nowhere else in the world is actual money handled with a lower ratio of loss, through dishonesty and carelessness, than in Wall Street.

Sources of Business.—The Hughes Report of June 7, 1909, remains, after a decade or more, the most discriminating analysis of operations in Wall Street. "There is a tendency," the Report pointed out, "on the part of the public to consider Wall Street and the New York Stock Exchange as one and the same thing. This is an error arising from their location. . . . An investigation was made of the transactions on the Exchange for a given day, when the sales were 1,500,000 shares. The return showed that on that day 52 per cent. of the total transactions on the Exchange apparently originated in New York City, and 48 per cent. in other localities." In 1919 only about 20 per cent. of the orders originated in New York City and 80 per cent. came from outside.

Seat of Stock and Money Markets.—Wall Street is the seat of (1) The Stock Market; (2) The Money Market. Each is distinct from the other, but both are interdependent. The Stock Exchange is the head of one, and the Bank Clearing-House and Federal Reserve Bank are the foci of the other.

The Stock Market is a place where securities may be bought (a) for investment; (b) for speculation. By its facilities for investment and speculation the Stock Market

brings together those who have capital to invest, and those who need capital for new enterprises or additional capital for old enterprises. It thus aids in the distribution of wealth and the development of the country. It brings into the service of business enterprise the savings of the thrifty, and enables hundreds of thousands of persons to put their savings into mighty enterprises.

The money market is in four main divisions, all closely allied to each other, and having many subdivisions:

(a.) Foreign exchange, by which the operations of international enterprise and international commerce are financed;

(b.) Domestic credits by which, through checks and commercial paper, food and merchandise are marketed and the manifold needs of inland trade cared for;

(c.) Promotion, by which corporate and other large enterprises are created, underwritten and financed;

(d.) Stock Exchange loans, both on call and time, by which investment and speculative transactions in securities are made possible.

The call money market is one of the notable functions of the Exchange, and will be discussed in Chapter XIX, on "The Use of Credit in Stock Exchange Transactions."

REFERENCES

Suggested Reading

"The Scope and Function of the Stock Market," S. S. Huebner in *Annals of American Academy of Political and Social Science*, May, 1910.

"Wall Street and the Country," Charles A. Conant, 1904.

"The A. B. C. of Wall Street," S. A. Nelson, 1900.

"The Stock Exchange from Within," Van Antwerp, 1913.

"The New York Stock Exchange and the Money Trust," H. S. Martin, 1913.

CHAPTER IV

SCOPE OF WALL STREET

With the rapid conversion of all forms of business into stock corporations, there has been a remarkable expansion in the scope of the world's stock markets during the past third of a century. In the United States the great bulk of the wealth of the country is now represented by stock and bond certificates. In 1912 the national wealth was officially computed at $187,739,000,000. In 1904 it was estimated at $107,000,000,000. In 1905 it was computed by the late Charles A. Conant[1] that the par of outstanding stocks and bonds issued by American corporations amounted to $35,000,000,000, which was 32 per cent. of the total wealth of this country in the preceding year, and 31 per cent. of the world's total of negotiable securities. But this amount, imposing as it is, represented only the more important corporations issuing stocks and bonds, and did not touch a vast aggregate of securities issued by small industrial and mercantile concerns. A much better and later measure of the scope of the American stock markets is afforded by the returns made to the United States Commissioner of Internal Revenue by the corporations paying the special excise tax under the corporation tax laws enacted in 1909.

Amount of Securities.—From these returns it appeared that on June 30, 1910, there were 270,292 corporations in the United States having capital stock amounting to

[1] "History of Modern Banks and Finance," p. 702, 5th Ed., 1915.

$52,371,626,752 and bonded and "other indebtedness" amounting to $31,332,952,696, a total of $83,705,579,448. Making allowance for the "other indebtedness," not represented by certificates, it is probable that the total of stocks and bonds issued by American corporations was in the neighborhood of $75,000,000,000.[2] That was about 60 per cent. of the nation's wealth, which in 1917 was estimated at $250,000,000,000. If only 50 per cent. of this were in stocks and bonds they would aggregate $125,000,000,000. Income tax returns showed, for 1917, 351,426 corporations; 92,591 were manufacturing and mining, 91,057 mercantile, 68,362 financial, 26,442 public service, and 72,974 miscellaneous.[3]

Their Distribution.—It is impossible by statistics to determine the number of persons owning this immense total of securities. But the number of individual holders is very large, and the number of persons having an indirect ownership through their interest in coöperative associations, such as mutual savings banks and insurance companies, is still greater. A leading authority[4] estimated that the capital stock of 234 leading railroad and industrial corporations amounting to $10,711,575,719 was in 1911 held by 980,399 persons. If the same proportion held for the entire $52,000,000,000 of capital stock, there should have been possibly 4,000,000 of shareholders in this country, not counting the owners of bonds. That was probably an over-estimate. But meanwhile, especially during lower prices for railway stocks, the public holdings have greatly

[2] To this total should be added the United States and the State, County and municipal bonds amounting to over $30,000,000,000, to obtain the aggregate of the negotiable securities in the United States. In 1900 the total of the world's negotiable securities was estimated at $111,077,764,333.

[3] Statistics of Income, Returns of 1917, p. 18, Internal Revenue Office, Washington.

[4] The New York *Journal of Commerce and Commercial Bulletin*, December 20, 1911. These annual calculations have been discontinued.

increased and broadened. So, too, of industrials like "Steel." Liberty Bond sales in 1917 and 1918 added fully 20,000,000 or more investors in government securities. Moreover, the savings banks of the country hold $2,291,-000,000 of stocks and bonds which are thus owned by over 12,000,000 of depositors. The ordinary and industrial life insurance companies are also big holders of securities which are thus indirectly owned by the holders of over 53,000,000 policies. Undoubtedly there is a very considerable degree of concentration of control, despite the Clayton Act (1914), of wealth through directorships; but never before in our national history has there been so wide a distribution of wealth; and this wide distribution has been made possible by the stock company form of carrying on the productive and distributive business of the country. Directly or indirectly nearly every family in the United States has an interest in the stock markets, and the prosperity or depression of the corporations affects the incomes of a vast and increasing proportion of the people of the country.

Bank Credits Based on Securities.—Moreover, stock and bond securities form the basis of a large part of our bank credits. In the Federal Reserve Bank statement of December 31, 1919, the loans and discounts of the national and state banking institutions amounted to $17,032,747,000, of which a large proportion was secured by stocks and bonds.

The $125,000,000,000 stocks and bonds in the United States are not all represented in the New York stock market. Every city of considerable size has its own local stock market in which local securities are dealt in, while fully twenty cities[*] outside of New York have stock

[*] Boston, Philadelphia, Baltimore, Cincinnati, Cleveland, Chicago, Detroit, St. Louis, Pittsburg, Rochester, Denver, Kansas City, Colorado Springs, San Francisco, Los Angeles, Seattle, Salt Lake City, Minneapolis, New Orleans, Washington.

markets organized and regulated by stock exchanges. Canada has three—at Montreal, Toronto and Winnipeg.

But the New York stock market is the largest in the country, and is the main market for the stocks and bonds of all the important corporations of the country, upwards of one-third of all the securities issued in the United States being listed on the New York Stock Exchange.

Listed Securities.—In 1902, when the first edition of this book was written there were $13,791,866,317 of listed and $1,227,219,645 of unlisted securities, making a total of $15,019,085,962 stocks and bonds admitted to dealings in the Exchange. On October 15, 1906, the total was $20,267,223,166. After the Hughes Commission inquiry the unlisted department was abolished, but so great was the growth in the output of securities that on October 18, 1911, there were $24,374,081,323 of stocks and bonds listed for trading in the Exchange. This was an average increase of about one thousand million dollars a year. The expansion between 1902 and 1906 was, however, greater than between 1906 and 1911. In 1868 it was estimated that $3,000,000,000 of securities were admitted to trading in the then existing two stock boards, and the increase from that to $35,461,170,225 by May 20, 1920, shows how enormous has been the growth in the number and size of corporations in 51 years, averaging $1,386,000,000 a year since 1911.

The table on page 53 shows the amount of each class of securities listed on the New York Stock Exchange, comparing October 18, 1911, and May 20, 1920.

Railroad Securities.—An inspection of this table shows how largely railroad securities predominate in the market. They aggregated over 55 per cent. of the total listings in 1911, had increased since 1902 from 9,129 millions to 13,508 millions; to 17,837 millions by 1920, or 50.3 per cent., notwithstanding the period has been one of rapid extension of

STOCKS	1911	1920
Bank stocks	$ 115,570,000	$ 123,356,000
Trust Company stocks	6,500,000	9,000,000
Railroad stocks	5,968,836,650	6,817,841,410
Manufacturing and Industrial stocks	3,341,039,750	6,012,654,394
Street Railway stocks	468,980,600	480,964,203
Express Company stocks	63,967,300	68,967,000
Mining stocks	467,062,650	591,752,497
Coal and iron stocks	143,520,300	357,481,764
Gas and electric light stocks	256,198,000	494,147,900
Telegraph and telephone stocks	548,916,200	742,319,200
Miscellaneous stocks	294,023,900	945,999,135
Total stocks	$11,683,795,350	$16,644,483,503

BONDS	1911	1920
Railroad bonds	$ 7,539,408,100	$11,019,883,415
Street Railway bonds	511,283,000	919,610,200
United States bonds	897,890,530	830,135,730
Foreign government bonds	1,879,359,000	2,857,813,800
State government bonds	121,711,693	179,867,262
Gas and electric light bonds	241,138 000	429,617 500
Manufacturing and industrial bonds	679,480 350	520,636,755
Coal and iron bonds	103,545,300	455,950,700
Telegraph and telephone bonds	246,497,500	462,125,300
City and county bonds	20,055,000	631,374,260
New York City securities	449,917,500	
Miscellaneous	....	509,671,800
Total bonds	$12,690,285,973	$18,816,686,722
Aggregate stocks and bonds	$24,374,081,323	$35,461,170,225

EXPANSION IN FIFTY-ONE YEARS

	Total securities listed.
1868 (estimated)	$ 3,000,000,000
1902	15,019,085,962
1911	24,374,081,323
1920	35,461,170,225

governmental control over railroad rates and railroad securities, even to the matter of valuation and capitalization. Manufacturing and industrial stocks and bonds

(1902-1911) increased from 2,808 million dollars to 4,020 millions, and to 6,533 millions by 1920.

Foreign Securities Listed.—A notable development of later decades has been the widening as well as the increasing volume of the market. In the first edition it was noted that "practically every dollar" of the securities admitted to dealings in the Stock Exchange "represents American investments." In 1920, on the other hand, foreign government bonds to an amount of $2,857,813,800 were on the list as compared with $119,529,600 in 1902. Government securities of Argentina, Bolivia, China, Cuba, Dominican Republic, Germany, Japan, Mexico and Russia are now traded in on the New York Stock Exchange. Besides a score of foreign governments and cities, there are also listed railroads of Canada and Mexico, street railways of London and Havana, and irrigation of South America. Every section of the United States, as well as the Philippines, is represented in the list. There were (May, 1920) 1,814 different securities on the list against 1,286 in 1902; of bonds there were 1,129, including 785 railroad issues. Of the 685 stocks listed, 327 were manufacturing and industrials, or 48 per cent.; and 171 railway stocks, or 25 per cent.

Comparison with London.—Wide as the service of the New York Stock Exchange is in geographical scope, it is still more national than international and is much less comprehensive than the London Stock Market, though in volume of speculative transactions it is undoubtedly greater.

In London the securities of every country and nearly every large city on the globe are dealt in, to the number of over 9,000. The principal securities of the United States are traded in there, and the Americans often form an important factor in the market. Such widely separated countries as Argentina and Persia, China and Canada,

Roumania and Chili, India and Mexico, Russia and Venezuela, Italy and Cuba, Morocco and Servia, are represented on the list. London, New York, Moscow, Montreal, Pekin, Buenos Aires, Calcutta, Milwaukee, Hong Kong, Rio de Janeiro, Manila and Cape Town are among the cities whose governments or corporations contribute to the greatness of the London Market. Any one who undertakes to obtain a grasp upon such a market must take a world view of things; and indeed the fully equipped modern banker is at once business man, political economist, diplomat and statesman. In a recent issue of the London *Weekly Times*, out of 410 different securities quoted, representing 17 different classes of securities dealt in on that Exchange, 24 were British government loans, 41 foreign governments, 29 home railway stocks, 22 foreign and colonial railways, 10 American "rails," 18 banks and discount companies, 19 insurance, 8 telegraph and telephones, 11 nitrate stocks, 39 rubber, 24 tea, 29 oil, 14 shipping, 9 copper, 32 miscellaneous mining, 40 South African (mainly mining), and 41 miscellaneous, including the Hudson Bay Company, whose issues are over 250 years old, having been chartered on May 2, 1670. This, of course, shows to what extent the stock company method of conducting business has been carried, and how naturally these stocks gravitate to a great central market representing immense investment capital. In 1917 the total par value of all securities quoted in the London Stock Exchange amounted to about $58,000,000,000.

England and France are notable for their stores of capital invested abroad. In 1910 British capital issues were $1,335,000,000—a record year of extraordinary investments and speculative activity. Sir George Paish estimated (1919) that in 1914, prior to the Great War, Great Britain's wealth was about £16,000 millions, of which some £4,000 millions consisted of foreign and colonial securities;

after writing off British obligations abroad and doubtful debts, that country had net foreign investments of at least £3,000 millions after the war. The pre-war investments of France distributed over surrounding nations, but more especially in Russia, amounted to £1,500,000,000. German investments abroad totaled not less than £1,500,000,000, many of which were realized on shortly before the war or sold to neutrals during the war, while much of that invested in the Near East was hopelessly lost.[6] New York, along with London, Paris, and Berlin, now stands second among the four great international money markets and its influence is felt wherever the credit system extends.

Foreign Commerce.—The volume of the foreign exchange transactions of New York it is impossible to estimate. There are no statistics now collected; and the Bureau of Commerce at Washington, it seems, has found it impracticable to obtain them, valuable as they would be. The great bulk of the foreign commerce of the United States, which in 1919 amounted to $10,328,002,754, of which $4,638,497,318 or 44.8 per cent. of the whole passed through New York, was financed in Wall Street. But in addition to this the foreign exchange markets of Wall Street conduct an immense business in the transfer of credits back and forth between the United States and foreign countries in payment of travelers' checks, security-investments, money borrowed, and other items of "invisible" exchange.

Domestic Commerce.—The domestic commerce of the country aggregates probably about forty-two billions of dollars a year, and of this amount it is fair to estimate that over one-half is financed in New York. The total bank clearings of the United States in 1919 were $417,519,523,388, of which $235,802,634,887 were in the New

[6] *The Contemporary Review:* "The Economic Outlook in Europe," September, 1919.

York Clearing-House. For thirty-three years New York's proportion of the total bank clearings of the United States has been about 60 per cent. This gives as fair an indication of the scope of the Wall Street money market as it is possible to arrive at.

The "banking power" of the United States in 1919[7] was \$45,756,300,000, of which \$10,000,000,000 was in the City of New York. This made 21.85 per cent. of the whole, but New York's total as thus given does not include the big private banks, two or three of which have resources greater than that of any public institution. In 1908 it was computed that New York's banking power amounted to nearly 10 per cent. of the banking power of the world.[8]

[7] Report of the Treasury, 1919—Finance (Comptroller's Report).
[8] The following is a record of bank clearings from 1897 to 1919:

	New York	Outside New York	Total
1919.....	\$235,802,634,887	\$181,716,888,501	\$417,519,523,388
1918.....	178,533,248,782	153,820,777,681	332,354,026,463
1917.....	177,404,965,589	129,539,760,728	306,944,726,317
1916.....	159,580,648,590	102,275,125,073	261,855,773,663
1915.....	110,564,392,634	77,253,171,911	187,817,564,545
1914.....	83,018,580,016	72,226,538,218	155,245,118,234
1913.....	94,634,281,984	75,181,418,616	169,815,700,600
1912.....	100,743,967,262	73,208,947,649	173,952,914,911
1911.....	92,372,812,735	67,856,960,931	160,229,778,666
1910.....	97,274,500,093	66,820,729,906	164,096,229,990
1909.....	103,588,738,320	61,564,713,413	165,153,451,763
1908.....	79,275,880,256	52,819,835,592	132,095,715,848
1907.....	87,182,168,381	57,589,507,214	140,771,675,595
1906.....	104,675,828,656	55,259,903,059	159,935,731,715
1905.....	93,822,060,202	50,169,568,273	143,901,628,475
1904.....	68,649,418,673	43,962,703,717	112,612,122,390
1903.....	65,970,337,955	43,238,849,809	109,209,187,764
1902.....	76,328,189,165	41,695,109,575	118,023,298,740
1901.....	79,427,685,842	38,982,329,340	118,410,015,182
1900.....	52,634,201,865	33,436,347,818	86,070,549,683
1899.....	60,761,791,901	33,285,608,882	94,047,400,783
1898.....	41,971,782,437	26,854,774,887	68,826,557,324
1897.....	33,427,027,471	23,802,043,485	57,229,070,956
1896......	28,870,775,000	22,463,156,000	51,333,931,000
1895......	29,841,797,000	23,430,494,000	53,272,291,000
1894......	24,387,807,000	21,157,303,000	45,545,110,000

REFERENCES

"The World's Wealth in Negotiable Securities," Charles A. Conant, *Atlantic Monthly*, January, 1908.

"Stocks and the Stock Market," *Annals of American Academy*, May, 1910.

"The New York Stock Exchange," H. S. Martin, 1919, Chap. VII.

"The Money Market in Relation to Trade and Commerce," Ernest E. Spicer, London, 1920.

CHAPTER V

THE STOCK MARKET

Two questions confront us at the threshold of this subject:

1. What is a stock market?
2. Why is there a stock market?

An answer to one is practically an answer to the other.

A stock market is an income market. It is a place where incomes are bought and sold. No one, it is true, goes to the Stock Exchange as he might to an insurance company, and, paying over the requisite amount of money, buys an annuity. Yet, essentially, the stock-market operation is the same. The stocks and bonds traded in on the Stock Exchange would be worthless unless they represented value either present or prospective. Bonds and preferred stock generally represent fixed income. Common stocks represent speculative income—that is, income that may vary from year to year, according to the earning capacity of the corporations issuing them. If a company has no income and no prospect of earning one, its securities are worth no more than so much waste paper. It is true that the stocks of an insolvent company are often quoted in the market, but their value consists in the control of the charter, the franchise, or some other privilege from which it is believed an income may some time be derived. Several years ago a list of 48 non-dividend-paying stocks was published whose average market price was 41, but every one enjoyed the prospect, immediate or remote, of

future dividends. There would be no stock market if there were no incomes.

In Paris an investor will say to his broker, "Buy me enough *rentes* to pay me an income of, say, 50,000 francs a year." He goes into the market to buy not *rentes,* but income. In New York the investor does not express himself so directly. He says to his broker, "Buy me $500,000 of bonds." Now, what he is actually buying is not bonds, but the income the bonds will yield. Before placing the order he has calculated exactly what will be the income, taking into account the premium paid, the interest promised, and the duration of the bond. All investments are thus made on the income basis.

Beginnings of the Market.—The stock market, therefore, rests upon a sound economic basis. In telling what it is we have indicated clearly why it is. Writing of the beginnings of the English stock market more than two centuries ago, Macaulay says:

> During the interval between the Restoration and the Revolution the riches of the nation had been rapidly increasing. Thousands of busy men found every Christmas that after the expenses of the year's housekeeping had been defrayed out of the year's income a surplus remained; and how that surplus was to be employed was a question of some difficulty. In our time, to invest such a surplus at something more than 3 per cent. on the best security that has ever been known in the world is the work of a few minutes. But in the seventeenth century a lawyer, a physician, or retired merchant, who had saved some thousands and who wished to place them safely and profitably, was often greatly embarrassed. Three generations earlier, a man who had accumulated wealth in a profession generally purchased real property or lent his savings on mortgage. But the number of acres in the Kingdom had remained the same, and the value of those acres, though it had greatly increased, had by no means increased as fast as the quantity of capital seeking for employment. Many, too, wished to put their money where they could find it at an hour's notice, and looked about for some species of property which could be more readily transferred than a house or a field. There were

a few joint-stock companies, among which the East India Company held the foremost place; but the demand for the stock of such companies was far greater than the supply. Indeed, the cry for a new East India Company was chiefly raised by persons who found difficulty in placing their savings at interest on good security. So great was that difficulty that the practice of hoarding was common.

Where there is a demand a supply is usually found. Out of this condition of things grew the English stock market, and by 1688 stock-jobbing was in full swing in London. Macaulay goes on to describe the output of new companies at this period. A crowd of projectors, ingenious and absurd, honest and knavish, employed themselves in devising new schemes for the employment of redundant capital. Some of the companies took large mansions and printed their advertisements in gilded letters. Jonathan's and Garroway's were in a constant ferment with brokers, buyers, sellers, and meetings of directors. Extensive combinations were formed, and monstrous fables were circulated for the purpose or raising or depressing the prices of shares.

An impatience to be rich [he added], a contempt for those slow but sure gains which are the proper reward of industry, patience, and thrift, spread through society. It was much easier and much more lucrative to put forth a lying prospectus announcing a new stock, to persuade ignorant people that the dividends could not fall short of 20 per cent., and to part with £5,000 of this imaginary wealth for 10,000 solid guineas than to load a ship with a well-chosen cargo for Virginia or the Levant.

Macaulay's account of the first English stock market and the evils to which it gave rise serves as a description of the stock market of to-day. It shows at once the legitimate reason for such a market and the evils to which it is exposed. We hear so much of the evils that we are apt to overlook the fact that the stock market represents the thrift and enterprise of the people even more than it does their gambling propensities.

Value of Organized Stock Market.—Wall Street is occasionally pictured in the newspapers as an American Monte Carlo. But it has been well said that there is no great modern nation without a Stock Exchange. The first Napoleon, who had a keen appreciation of everything that contributed to the glory of France, did not deem it beneath his dignity to lay the corner-stone of the Paris Bourse. John R. Dos Passos has said that "it is absolutely certain that without the existence of great public marts, like the New York and London Stock Exchanges, the marvelous development and progress of this country, which make it the wonder and admiration of the world, would not have been attained." He quotes Judge Bramwell, in a leading English case, as deciding that it is no disadvantage that there should be a market where speculation may go on, for it is owing to a market of this kind that there are so many railroads and other useful undertakings.

Investment of Savings.—The Stock Exchange provides a place for the investment of savings. A distinct immorality attaches to hoarding, but investment carries a double blessing: it benefits the investor and those who have the use of the money. There is a limit to real estate investments. Not everybody can put their surplus money into land. There must be other objects of investment. So capitalists, large and small, enter the stock market. The mechanic who puts his few dollars into the savings bank enters the stock market by proxy; the bank invests his money for him, some of it in real estate, some in securities. The professional man who buys an insurance policy enters the stock market by proxy; the insurance company invests its assets very largely in securities. When it is said[1] that there are in the United States 12,000,000 savings bank depositors and more than 53,000,000 life-insurance policies, it is seen how large a proportion of the population is at

[1] See chapter on "Scope of Wall Street."

all times thus indirectly concerned in the stock market. Business men and others enter Wall Street directly, for the purpose of investment of the profits of their own business. The stock market, therefore, performs the most beneficent function of providing a place where investments can be made and incomes secured.

Marketability.—As practically all large business affairs are now carried on by companies, it follows that stocks and bonds constitute about the only form of investment outside of real estate. And they are the best form of investments; first, because they are so easily converted into cash, and, second, because they are so easily hypothecated for loans. There is always a market for securities in Wall Street. There has never been a time in recent years when a stock or bond of which Wall Street possessed any knowledge could not be sold there, provided the price was satisfactory. A man can convert a fortune into money in a day, or, like Andrew Carnegie, capitalize his entire business in a single operation. To obtain a loan on real estate one is put to considerable expense and labor. There must be a search of the title, and the mortgage to secure the loan must be duly recorded. But to obtain a loan on marketable securities, all one has to do is to carry them in an envelope to a lender of money, and the line of credit may be obtained in a few minutes.

The stock market exists, therefore, because the business of the age has need of it, because it is essential to civilization. But, like everything else human, this useful agency of thrift and enterprise is liable to abuse. Macaulay has shown how more than two centuries ago men who had saved money sought to invest it, an act of the highest wisdom, and how the demand for investment grew, first into a craze for speculation, and finally into gambling and fraud.

In Wall Street, upon the substantial foundation of invest-

ment, has been built a vast superstructure of speculation. Speculation is an investment of money in which large risk is taken in expectation of great gain. But it is not easy to draw the line where investment ends and speculation begins. In Wall Street such a line is drawn, but it is an arbitrary division. When a security is bought and paid for in full, put away in a place of safe keeping and held for the income it yields—that is called an investment. The great bulk of the dealings in bonds are for investment. When a security is bought on margin and held for sale as soon as the price advances—that is speculation. The bulk of the dealings in stocks are speculative.

Credit in Speculation.—But speculation may be as truly an investment as investment itself. Most investors who pay outright for their securities are ready to sell them again at a profit. They buy them for the incomes, but if the advance price is large enough, the profit in selling may be more attractive than the profit in keeping. On the other hand, the speculator buys on a margin to sell again on a rising price, but he buys and sells on an income basis the same as the investor. Most wholesale business in modern trade is done on credit, which is only another form of the Wall Street system of margins. The merchant who restricts his purchases to the amount his cash capital can pay for in full, must do a comparatively small business. The wholesaler's capital, in a certain sense, corresponds to the speculator's margin. The former buys on time and borrows of the bank the money to pay for the goods as the time for payment approaches. With a capital of $100,000 he may buy, say, $500,000 worth of goods. It is only by a system of credits that the great operations of modern business can be conducted. The speculator buys stocks, like the merchant, on credit. With a capital of $10,000 the investor can buy 100 shares of stock, selling at par value of $100 per share, and pay for them in full.

But with $10,000 deposited as a margin the speculator can buy ten times as much stock, with the chance of realizing ten times the profit. Of course the risk is much greater. If the price declines the speculator may lose his entire margin or capital; but the merchant also runs a risk in buying goods in excess of the amount of his capital. Except that there is a greater mobility in the stock market than in other markets, so that changes in prices are more rapid and extreme, the risk in both cases is equal.

The operations of the merchant and the speculator are, therefore, in the last analysis, essentially the same, except that the speculator's risks are larger. If all business, whether in stocks or in trade, were conducted strictly on the cash or investment basis, the transactions would be very limited. Credit means expansion and activity. In times of panic, when credit is withdrawn, speculation ceases, and all business becomes of the investment order. Then stagnation sets in, wages fall, and widespread suffering is caused. Some one has said that speculation is "a disease of the mind"; but Henry Clews, in his testimony before the Legislative Committee which investigated corners in 1881, gave a far better definition. He said that "speculation is a method for adjusting differences of opinion as to future values, whether of products or of stocks. It regulates production by instantly advancing prices when there is a scarcity, thereby stimulating production, and by depressing prices when there is an overproduction."

Gambling a Disease.—There is a point, however, where speculation becomes a disease of the mind: it is the point where it changes into mere gambling. If it is difficult to draw the line between investment and speculation, it is still more difficult to draw that between speculation and gambling. Yet there is a difference between the two, although many critics of Wall Street fail to see it. The speculator may be defined as a man who, making

a study of business conditions and of the earning power of the companies in whose stocks he purposes to trade, buys because he believes that prices ought to advance, or sells because he believes they will fall; and does so on a margin ample to protect him against any ordinary vicissitudes of the market. He exercises the same foresight and conservatism as does the merchant who places a large order for goods. The gambler in stocks is one who goes it "blind," buys and sells without due study of conditions or of the property in which he invests, but trusts to chance. He often risks more than he can afford to lose, perhaps wasting the savings of many months in one transaction. He might as well risk his money on a horse race or a roulette table. Wall Street is full of gamblers of this kind. "People deal in chance," said Jay Gould to a Senate committee. "Your minister, doctor and barber have all the same interest in speculation."

Glamour of Speculation.—Into the Street crowd hundreds of men and women, drawn by the stories told of the enormous fortunes made there, the great sums cleared in one deal, the big profits of a single transaction. The glamour of speculation fascinates them. In the year 1902 the story of John W. Gates's sensational deal in Louisville and Nashville stock, in which he bought control of a great railroad in a few days, served so to excite the gambling propensities of the country that Wall Street was soon filled with a crowd of outside speculators. Without training or study or intelligent consideration, these outsiders, or "lambs," as they are often called, stake their money on the mere chance of the rise and fall of prices. In other words, they bet on quotations. No wonder they are generally all sheared in the Street. "Gamesters die poor," says Andrew Carnegie in his "Empire of Business," "and there is certainly not an

instance of a speculator who has lived a life creditable to himself or advantageous to the community. The man who grasps the morning paper to see first how his speculative ventures upon the Exchanges are likely to result, unfits himself for the calm consideration and proper solution of business problems." If Mr. Carnegie had used the word "gambler" in place of the word "speculator," his statement would have been absolutely correct.

The gambling in stocks, however, is not limited to the class of outside amateurs. The Street has its professional gamblers as well—men who know every trick of the desperate business in which they are engaged; "plungers" who take enormous risks for the chance of enormous gain. A very considerable proportion of the business of the Stock Exchange, and practically all the business of the bucket-shops, is pure gambling.

Volume of Transactions.—The statistics of the "boom" year of 1901 may be studied to advantage by those who desire to obtain an idea of the scope of speculation and of some of the laws which govern it. In that year the total sales of listed and unlisted stocks traded in at the Stock Exchange represented a par value of $25,272,329,200, which was three times the total par value of all the stocks admitted to dealings by the Exchange—a fact revealing the speculative character of the transactions. In a single year the entire supply of stocks was sold three times over. These stocks included many that are rarely traded in at all. In the active stocks the speculation was much heavier, and there were some whose entire capital changed hands ten to twenty times over in the course of a year. On the next page are 9 stocks the total number of whose listed shares were, in 1901, sold nearly fifteen times over.

This means not only speculation, but overspeculation. Such a market could hardly be termed healthy, and it is not surprising that at the height of the speculation

	Total sales shares	Number shares listed	Times sold
St. Paul	12,700,000	558,218	$22\frac{3}{4}$
Union Pacific	22,246,000	1,040,514	$21\frac{1}{4}$
American Sugar	8,121,000	450,000	18
Rock Island	8,195,000	599,619	$13\frac{1}{2}$
Manhattan	6,086,000	480,000	$12\frac{3}{4}$
Wabash (preferred)	3,009,000	240,000	$12\frac{1}{2}$
Atchison	12,177,000	1,020,000	$11\frac{7}{8}$
Brooklyn Rapid Transit	5,362,000	450,000	$11\frac{7}{8}$
Erie	11,185,000	1,123,470	10
Total	89,081,000	5,961,821	$14\frac{5}{6}$

the severe convulsion of May 9 occurred. Nine days earlier, on April 30, the total sales of the day were 3,270,884 shares, of which 2,150,517 were of nine stocks, as follows:

	Total sales	Number of shares listed
United States Steel	489,444	5,084,780
Erie	309,800	1,123,470
Atchison	247,450	1,020,000
United States Steel (preferred)	220,140	5,102,773
Union Pacific	206,353	1,040,514
Southern Pacific	151,800	1,978,321
Atchison (preferred)	141,530	1,141,995
Northern Pacific	94,300	1,550,000
New York Central	89,700	1,150,000

Overspeculation.—Thus, in one day, about one-eighth of the entire capital stock of 9 great companies was sold in the Stock Exchange. On April 24, 1901, 662,000 shares of Union Pacific—two-thirds of its entire issue—were sold. On April 15, 1902, 877,000 of the total 1,200,000 shares issued of Southern Railway were traded in. On one day in February, 1893, there were 957,955 shares ($50) of Reading sold. A great "turn over" of sales is of course necessary in the process of distributing securities among investors after they leave the hands of the manufacturer.

A bushel of wheat or a quarter of beef or a yard of cloth is sold several times before it reaches the consumer. So the large sales on the Exchanges are, in the main, in accordance with a natural economic law.

It is true in a sense as Bacon said many years ago, "As for the chopping of bargains, when a man buys not to hold but to sell over again, that commonly grindeth double, both upon the seller and upon the buyer." But this is one of the necessary evils of the whole system of transportation, and it is compensated for by the benefits conferred. The same thing is true of the process of transporting goods from one place to another. It involves a tax which "grindeth double" both upon the shipper and the consumer, but the transportation benefits both. Speculation is, in one of its aspects, the transportation of securities from producer to consumer. But when it is said that in 1910 about 225,000,000 shares of stock valued at $20,000,000,000 [2] were sold on the five principal Stock Exchanges of the United States, the question may fairly be asked whether a considerable proportion of this total did not represent overspeculation which is waste, the evil of which must be charged off the value of speculation properly conducted.

It is only within a recent period that the volume of stock transactions has been studied with a view of ascertaining what, if anything, they reveal of the real conditions underlying the stock market. Most people imagine that the daily total of sales shows only the degree of the market's activity. Sometimes the sales do not even do that, for it sometimes happens that professional manipulation swells the total of sales when the market actually is dull. Some years ago commission houses were complaining of a lack of business when the daily sales averaged 600,000

[2] Estimate of Prof. J. H. Hollander, of Johns Hopkins University, Baltimore.

shares. As a matter of fact, however, the record of sales intelligently studied proves one of the most important indices to the actual conditions of the market. One of the oldest and largest banking-houses in Wall Street keeps a careful record of total sales as one of its guides to its judgment of the course of the market. Taking the sales of 20 active railroad stocks as the basis of its calculations, it has for twelve years divided the record of these sales into two columns, one giving the total transactions when prices were advancing, and the other the sales when prices were declining. The following table, prepared by this house, shows the millions of shares of 20 active railroad stocks dealt in in the bull and bear periods of each year:

SALES

	Millions of Shares		Excess	
	Bull periods	Bear periods	Bull	Bear
1890	24	15	9	..
1891	26	24	2	..
1892	38	48	..	10
1893	17	51	..	34
1894	16	23	..	7
1895	32	30	2	..
1896	21	30	..	9
1897	47	22	25	..
1898	49	47	2	..
1899	116	88	28	..
1900	114	43	71	..
1901	170	72	98	..

An examination of this table shows that in the ten years from 1890 to 1899, inclusive, the number of shares dealt in in the bull periods was only 8,000,000 more than the number sold in the bear periods. In other words, every share bought in those ten years was sold again,

excepting 8,000,000, the total transactions of the 20 stocks having been 764,000,000 shares. It is a fair inference that the 8,000,000 went into the hands of permanent investors. The remaining 756,000,000 shares represented the speculative business. In the panic year of 1893 the sales in the declining market were 34,000,000 shares in excess of the sales in the bull periods. In the boom years 1900 and 1901 the excess of shares traded in in the bull periods over those sold in the bear periods was 169,000,000. In the preceding ten years, as has been seen, the bull and bear periods nearly balanced each other, but here, in two years, a tremendous excess appears on the bull side. The inference drawn from this was, that an immense number of shares had been bought for sale, but were still held awaiting a favorable opportunity for realization of profits or possibly a time of forced liquidation. This inference later developments proved to be correct.

During the year 1919 the sales of stocks averaged upwards of 1,115,000 shares a day, including Saturdays as half-days, when the Exchange is open two hours. There are occasional Saturdays, however, in which the two hours' business aggregates more than 1,000,000 shares.

Taking for illustration 900,000 shares a day as a basis of calculation, it was formerly estimated that 300,000 shares represent manipulation, 300,000 the transactions of the room traders, and 300,000 the actual buying and selling by pools and public. This estimate, of course, was merely an estimate of average conditions, but it is no longer accepted on the ground that it exaggerates the volume of manipulative transactions, and under-estimates those of *bona fide* business. There are days when manipulations have larger place in the dealings. There are other days when the room traders constitute nearly the entire market. There are days in which the public is predominant, and these are far more numerous than formerly.

Number of Operators.—Taking one month with another, and one year with another, there is probably an average of 75,000 persons in the stock market all the time. In periods of activity there are doubtless many more, in periods of dullness and uncertainty many less, but the market can, as a rule, depend upon this support for its speculative business. It does not follow that the same 75,000 persons are in the market all the time. Wall Street is like a hotel. New guests are constantly arriving and others leaving. Sometimes every room is occupied and cots have to be placed in the halls, so great is the crush. At other times half the house is empty. This estimate applies only to the New York Stock Exchange and its customers. To the 75,000 individuals who constitute its market, must be added the many patrons of the Consolidated Stock Exchange. To the number should also be added the small speculators who frequent the offices of the irregular and bogus brokers, and who may be likened to the camp followers of a great army. The New York Stock Exchange, however, makes the market for stocks. Its prices govern the outside speculation as absolutely as they do that within its own walls; and while the outside speculation is of a very considerable, though unknown, volume, in speaking of the "stock market" the reference is always to the business of the Stock Exchange.

"Bulls" and "Bears."—The market is divided into two main divisions: one, the bulls, representing those who buy stocks in the expectation that they can sell at higher prices; and the other, bears, or those who sell stocks in the expectation that they can buy them later at lower prices. A bull who has bought is "long" of the market; a bear who has sold is "short" of the market. A "long" who sells at higher prices is said to have realized his profits, or if he sells at a loss is said to have liquidated. In case the sale is the result of an exhausted

margin or the calling of loans, it is forced liquidation. A "short" who buys stocks is said to have "covered," and this term applies whether he has bought at a profit or a loss. When too many persons have bought stocks the "long" interest becomes too heavy for the market to carry, and it is generally comparatively easy for the bears, by selling short, to depress prices and force the "longs" to sell, when the "shorts" can cover at a profit. This operation is generally called "a bear raid." On the other hand, when the "short" interest becomes too large it is generally easy for the bulls to advance prices, thus forcing the "shorts" to cover. A "short" interest is often an element of strength to the market because it creates a demand for stocks to cover.

Professionals and Public.—There are two other divisions in the market, the professionals and the public. The professionals are those who make a business of speculation. The public is a class of individuals who, engaged in trade or commerce, appear in the Street as occasional speculators.

In a newspaper of August 3, 1835, appeared this interesting item:

> New Orleans, Kentucky, Tennessee and Ohio stocks sell at high prices. Merchants bring parcels of these stocks across the mountains. They are better than bills of exchange. A great many merchants in the streets around Wall Street now dip privately in stock speculation. Many of the officers of the banks and insurance companies do the same thing. This is the cause of the great increase of stock speculation. Pearl Street is nearly impassable by reason of the quantity of boxes on the sidewalks. So in Wall Street by the groups of brokers.

This is an early picture of the public in the stock-market. To-day, as nearly seventy years ago, merchants dip not only privately, but openly in speculation; while not only New Orleans, Ohio, and Tennessee are represented in the market, but Chicago—a city then unknown—and the

great far West, reaching even to the Pacific. For the stock market is thoroughly national in its scope.

A stock market that has no "public" is in a most unsatisfactory condition. Professionals can and do buy and sell among themselves, but this is a process not unlike the "swapping" of horses between regular horse traders. The public supplies the new interest in the Street, the fresh demand, the increased capital.

The professional is a class that includes many different kinds and degrees of operators. The banking-house carrying 150,000 and more shares and the curbstone speculator who buys 10 and 20 shares may both be, in the true sense, professionals. They are both, one in a wholesale and the other in a retail way, engaged in the business of discounting the future. Both make a study of values and make a profit, large or small, by their intelligence in correctly reading the signs of the times. They are the skilled workmen of the Street, and they constitute a highly trained body of experts in stock values and market prices. In their way they display as much ability as the scientist, the artist, and the artisan. In this class of professionals are many skilled in manipulation. In this class also must be placed the room traders, or those members of the Exchange who do business only for their own account and who become skilled in knowing how to take quick advantage of the ever-moving prices in the Board-Room. To the professional, speculation is like a game of chess; and a man like James R. Keene often played it with the skill of a Lasker, calling "mate in twelve moves" before his opponent even realized that he was in difficulty.

Insiders.—There is still another class of speculators who are called "insiders." They are directors or officials of corporations or in other positions where it is possible to obtain inside information as to the business of the companies whose stocks are traded in in Wall Street. They

know things in advance of the public or even the professionals. They are able to speculate on the vantage-ground of certain knowledge, but even insiders sometimes slip in their operations. There have been speculative directors who, selling the stock of their own company short, have found themselves cornered. It is an adage in the Street that there is no easier way to lose money than to bet on a "sure thing."

Railroads and Industrials.—There are 752 different stocks admitted to dealings in the Stock Exchange. Ordinarily about 200 of these are actually traded in on any one day, and 150 stocks constitute a minimum day's market. Stocks actually traded in are called active; those not traded in are inactive. A stock may be active to-day and inactive to-morrow, and the reverse. There are two main divisions in the stock-list, namely, railroad stocks and industrials. There are several subdivisions in each of these two classes. The railroad stocks are divided into groups representing systems. For instance, there are the trunk-line group, representing the Pennsylvania, the New York Central, the Erie, the Lackawanna, and the Baltimore & Ohio; the coalers, including the Reading, the Jersey Central, the Lehigh Valley, the Delaware & Hudson and the Lackawanna, which are carriers and miners of anthracite coal; the Grangers, which include the St. Paul, the Northwestern, the Burlington, the Rock Island, and other lines in the grain-producing section of the country; and the transcontinental stocks, comprising the Union Pacific, the Southern Pacific, the Western Pacific, the Atchison, the Northern Pacific, and the Great Northern, which are lines stretching from the Middle West to the Pacific. The traction stocks are those of the leading street-railway systems. The industrials are divided into groups representing manufacturing, mercantile, oil, gas, electric,

and other companies. Both classes of stocks are further subdivided into groups representing ownership. For instance, there is the great Morgan group comprising railroads, industrials and banks; the Standard Oil or Rockefeller group, also of railroads, industrials and banks; the group long identified with the Gould estate, the Vanderbilt group, the Union Pacific, formerly the Harriman group, the group formerly controlled by Edwin Hawley, the Hill group, and others.

It is important to keep these different classes and groups in mind in order to understand Wall Street, for the stock market is a collection of many small markets, each distinct from the other and subject to special influences, and yet bound to the others by certain great forces. There are days when the entire list rises or falls, swayed by some irresistible influence which controls the movements of prices without distinction of classes or groups or names. On other days, however, the different groups move independently of each other. For instance, if the banks are discriminating in loans against unlisted stocks, these may be very weak while the rest of the stocks may be strong. At other times the industrials advance, while the railroad stocks, perhaps because of wage awards or some adverse legislation, may decline. Bad crop news, which would depress the Grangers, might not have any effect on the transcontinental stocks. A strike of miners would hurt the coalers, but might not affect the Grangers. There is, however, a strange thing in the market which is called "sympathy," and it sometimes happens that one stock or group of stocks will have a sympathetic effect upon another, although there is no close connection between them. The market, as a whole, taking one month with another, reflects the average industrial and agricultural conditions of the country; and it is thus true that "Wall

Street is the accepted mirror and barometer of all American business."[3]

Publicity of Prices.—The stock market is connected with the outside world by means of its price quotations. This is entirely open and accurate. On this question of safeguarding the interest of the public by means of its quotations, Otto H. Kahn recently said:

> There is no other Stock Exchange in existence in which the public has that control over the execution of orders which is given to it by the practice—unique to the New York Stock Exchange—of having every single transaction immediately and officially recorded when made and publicly announced on the ticker and on the official daily transaction sheet.

REFERENCES

"The Paris Bourse and French Finance," William Parker, New York, 1920.

The two volumes of Van Antwerp and Martin on the New York Stock Exchange, Nelson's smaller volume on the Consolidated Exchange, and the discussions of Hartley Withers and others on London's Exchange, contain useful chapters for more extended reading. The New York *Street*, (Weekly) during 1919-20 ran a series of articles on the world's leading stock exchanges.

[3] F. W. Hirst, Editor of the *London Economist.*

CHAPTER VI

INVESTMENT, SPECULATION AND GAMBLING

So fundamental to a right comprehension of the function of the stock market is an understanding of the distinctions between investment, speculation and gambling, that a further and more detailed statement is needful. The Hughes Commission put a discussion of these distinctions into the very beginning of its report on the Stock Exchange, and rightly so, because the existence of the Wall Street system depends upon a correct conception of these differences, for, if speculation is immoral, it should, if possible, be prevented.

During a visit at the house of a relative in Pasadena, the author became acquainted with his next-door neighbor, a man who had spent his life in the far Western country. One day he came to the writer, with a triumphant smile on his face and a bottle in his hand. He poured out a little of the contents of the bottle that I might see it. "Look," he said, "it is petroleum from my oil well."

He then proceeded to tell how he and two friends had prospected for oil in Southern California, and finally put $26,000 in purchasing the territory and boring a well. "It was a gamble," he said. "We bet $26,000 that there was oil in the well we located. We have won the bet."

He was mistaken; it wasn't a gamble. It was a speculation at least so far as this man was concerned.[1] For he understood the oil business, and being familiar with the

[1] California's oil yield has meanwhile vastly exceeded its gold production, which latter almost ceased in 1920 under a fixed price and higher costs.

characteristics of oil territory, he had not risked his money until he had gone over the ground thoroughly, noted every feature, made measurements and tests, and finally located the place for a well with a judgment which the results proved to have been sound. He took risks, indeed, large risks. His use of his money was not an investment, as it would have been if he had bought a known producing property. It was a speculation. He did not know that there was oil there. But he had faith that there was oil and acted on that faith.

Distinctions.—An investment is an operation based primarily on sight or knowledge.

A speculation is an operation based primarily on faith.

A gamble is an operation based primarily on chance.

One writer declares that investment is a science and speculation is an art. But both are equally science and art.

Suppose, however, that this Pasadena man had been without the experience necessary to take intelligent risks. Suppose he had bought a prospect blindly without consideration, investigation, study. He might have "struck oil," but it would have been a gamble quite as much as if he had bet his money on the turn of a card. Suppose now that this oil operator should form a company to take over the oil well that he has discovered, and should issue a prospectus offering the stock for sale. Suppose that this prospectus gets into Eastern capitalists' hands, and attracted by the prospect of ten, twenty or forty per cent. profits, one of them thinks of buying some of the stock. What does he know about oil wells in general or that oil well in particular? He is 3,000 miles away, and proposes to bet his money merely on what a stock circular says. That would be simply gambling. A California miner once said that no one had any business to put his money into mines except the professional miner who knew the business,

or else a rich man who could afford to lose his money. Everybody else who invested in mines was essentially a gambler.

It is not too much to say that there is more gambling by honest but misguided folks, who put their money into projects that they know nothing about, than there is in the margined operations of the New York Stock Exchange, the bulk of whose business is done by men who have at least some understanding of the art of taking large risks intelligently.

Now suppose this Pasadena oil man in capitalizing his oil well for the stock company should issue and sell at par $1,000,000 stock for property worth $100,000. In such a case he would be a crook, a thief, quite as much as the professional card player who plays with marked cards. He could not be strictly called a gambler, for he would be putting his money on "a sure thing." But he would be a thief, quite as much as if he held up a man at the point of a pistol and stole the contents of his pockets. And any newspaper which printed the promoter's lying prospectus as a paid advertisement, having a pretty shrewd idea of its true character, would be his partner in a criminal transaction.

It is unfortunate that the words "investment," "speculation," and "gambling" should be used so loosely, without a clear conception of the difference between them. One is often employed in place of the others. Many a beautifully printed prospectus speaks of a project as an "investment" when it is nothing else than a gamble, while the word "speculation" has, through long and constant misuse, acquired a popular odium which does not rightly belong to it.

If we restore the true meanings, we shall promote sound thinking on some important subjects. Even the report of the Governor Hughes Commission, admirable as it is,

in most respects, is not altogether clear in the distinctions it makes between investment and gambling. While it shows conclusively the economic advantages of speculation, it reveals some confusion of thought which is liable to do harm in befogging the issues at stake. In saying that speculation may be wholly legitimate, or pure gambling or in partaking of the qualities of both, the report is far less accurate than in declaring that a distinction exists between speculation which is carried on by persons of means based on intelligent forecast and that which is carried on by persons without these qualifications. Speculation is never gambling, though the machinery, which is created to facilitate the operations of speculation, may be used by gamblers.

Definitions.—In the business of the Stock Exchange, investment is the purchase of securities to keep for income. In making such a purchase safety is the primary consideration, the amount of the income is important but secondary. What the investor is really doing is buying an income, but it is of the first importance to him that the income should be safe. In investment, therefore, risk is reduced to a minimum.

Stock speculation is the purchase of securities, usually on margin but sometimes outright for cash, with the object of selling again at a higher price, or else of selling the securities at one price with the object of buying them in later at a lower price. Income and safety are essentials in investment; risk and profit in speculation. To secure profit the speculator is willing to take larger risks than the investor, so that speculation implies intelligent risk. Gambling is blind chance. All three operations can be carried on by the machinery of the market, and it is difficult to distinguish between them, but they should not be confounded, one for the others. They are three different things. The market should by its rules strive to reduce

gambling to the smallest possible proportions, but to destroy the opportunities for speculation in order to prevent gambling would be like killing a man in order to get rid of a wart on his nose. These definitions are substantially confirmed by no less an authority than Thomas F. Woodlock. Quoting C. M. Bergstresser as saying that speculation begins and gambling ceases, when foresight enters, Mr. Woodlock goes on to show that the true distinction between stock speculation and gambling lies not in the act performed, but in the state of mind [2] of the man performing it. What he means is this: Three men buy 1,000 shares of Pennsylvania stock. A buys for investment, intending to keep for the income from dividends. B, after intelligent study of railroad, market and general business conditions, buys the stock in order to be able to sell later at a higher price, just as a merchant may buy a million yards of cotton sheeting with the intention of selling later at a profit. Both may or may not employ their credit in making the purchase, but the operation is a speculation. C buys the stock blindly. He simply bets that the price will advance. In A's case the risk is small; in B's case the risk is large but intelligent; in C's case the transaction is all risk, mere blind chance.

Same Machinery for All.—Now all three of these operations are conducted, as has been stated, by precisely the same market machinery, and to the observer they may appear exactly the same. What complicates the problem of separating the wise from the foolish is the fact that the man, who may think he is investing and honestly intends to do so, may, through ignorance and folly, be

[2] The same thing is said by President Hadley: "The difference between legitimate speculation and gambling lies neither in the subject matter nor in the form of the transaction, but in the intent and purpose. Legitimate speculation involves anticipation of the needs of the market and power to assume risks in making contracts to meet these risks."

employing his money in a gamble; while the professional speculator may, by the exercise of intelligent foresight, be more truly a conservative and constructive force in the community than the foolish investor. The outright purchase of $10,000 bonds by an ignorant investor may, under certain conditions, be more truly a gamble than the purchase of 1,000 shares of common stock on 10 per cent. margin by a shrewd speculator.

The question therefore presents itself: Is it worth while to enact laws to prevent speculation in order to make gambling impossible? If it is not worth while to do that, is it possible by new rules and regulations to destroy the opportunities for stock gambling while preserving the opportunities for speculation? The problem is larger than the stock market. The U. S. Industrial Commission of 1900 said of the American system of commercial distribution of farm products: "It is essentially a speculative system from beginning to end—speculative in the sense that after the products pass out of the producers' hands and until they pass into the consumers' control, there is not a moment nor a stage in the distributive movement during which the one who has legal control over the property in question does not run the risk of a rise or fall in the value of the property."

The Hughes Commission in dealing with this problem acted on the principle that Exchanges can accomplish more than legislatures; in other words, that regulation of the market by Exchanges is to be preferred to regulation by the government, and this is the judgment of all who have studied the subject deeply. The Hughes Commission recommended a number of changes in the Stock Exchange system, nearly all of which have been substantially adopted by that institution. But even with these changes it is still possible to gamble in stocks, and even if the Exchange were abolished, the gambling would con-

tinue and be even worse than under the rules of a self-regulated market. Yet there are a number of publicists who propose to enact laws prohibiting speculation in stocks and staples, unmindful of the disastrous consequences of such a policy. The results of governmental interference with the operations of a free market were clearly shown by the experience of Germany, which, after several years of attempted regulation of speculation to an extent that amounted to practical prohibition, had finally been obliged to reverse its policy which resulted in driving away business that was beneficial without preventing secret and demoralizing gambling operations.

Interference with Economic Law.—All attempts unduly to interfere with economic law result in disaster.

The Supreme Court of the United States in the celebrated Board of Trade case (opinion rendered by Justice Holmes) declared:

> The plaintiff's chamber of commerce is, in the first place, a great market, where, through its eighteen hundred members, is transacted a large part of the grain and provision business of the world. Of course, in a modern market contracts are not confined to sales for immediate delivery. People will endeavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophes, equalizing prices and providing for periods of want. It is true that the success of the strong induces imitation by the weak, and that incompetent persons bring themselves to ruin by undertaking to speculate in their turn. But legislatures and courts generally have recognized that the natural evolutions of a complex society are to be touched only with a very cautious hand, and that such coarse attempts at a remedy for the waste incident to every social function as a simple prohibition and laws to stop its being are harmful and vain. This court has upheld sales of stock for future delivery and the substitution of parties provided for by the rules of the Chicago Stock Exchange. Clews *v.* Jamieson, 182 U. S., 461.

A Civil War Illustration.—It is recorded that the one time Abraham Lincoln used strong language in the White House was when Governor Curtin referred to the Wall Street gambling in gold during the awful crisis of the Civil War. "Curtin," said Lincoln, "what do you think of those fellows in Wall Street who are gambling in gold at such a time as this? For my part, I wish every one of them had his devilish head shot off."

Even as Lincoln spoke, the Government began to use its power to prevent this gambling in gold and a law was enacted having that end in view. It remained on the statute books, however, only a few days. Why?

Because the attempt to regulate or limit the market by governmental action only made matters worse. Gold quickly advanced from 198 to 250, and instead of the evil being done away with, it was actually aggravated. Moreover, bad as the gambling in gold was, the market transactions—even the speculations—in gold were beneficial to the country; and the establishment of the Exchange where the transactions in gold were carried on, and which for a number of years virtually controlled the business of the country, was an economic necessity. More than that, countless people at that time were obliged to sell gold "short," that is, to sell something they did not own, intending to cover in the future, in order to protect themselves in their mercantile operations; and instead of selling short under these conditions being a wicked and gambling process, it was described as being absolutely essential to the conduct of legitimate business; and Horace White declares that not to have sold "short" at that time would have been to make all business a gamble. In other words, by using the speculative market, merchants saved themselves from greater speculative risks in their own trades. That, in fact, seems to be one of the uses of the speculative

exchanges, namely, that they make the legitimate operations of life less hazardous by localizing risks in the form of specialized services.

Mr. White is confirmed by President Hadley of Yale University, who says in the "Cyclopedia of Political Science":

> The law, under the pressure of public sentiment, was obeyed; but its results were the very reverse of what the public had anticipated. The event proved that gold speculation had been the means of steadying the market; without it gold rose 100 per cent. in two weeks, and then dropped 50 per cent. at the hurried repeal of the prohibition.

Short Selling.—This incident is a good illustration of the value of short selling which is not always either immoral or injurious. What on its face may look like the depreciation of other persons' property may be, and often is, an act of the highest conservatism. If there had been no "shorts" to cover in the panic of 1907, the whole market would have completely collapsed, and the entire business of the country would have suffered irreparable injury. Speaking of short sale Judge Barnard, of the Circuit Court of the District of Columbia, said in rendering a judgment in a Stock Exchange case:

> A short sale is not a gambling operation. The law defines a gambling operation to be one where the parties make a contract of purchase and sale without intent on the part of either to deliver or receive the article which is the subject of the contract. Nothing passes between the parties beyond the money from loser to winner, and nothing else was intended to pass. This is a mere bet—a gamble. But where actual delivery is made of the goods contracted to be sold and received, the transaction becomes a commercial one. The testimony shows that in a short sale delivery of the stocks sold is made, and the purchase price paid. That fact establishes it as a commercial transaction. It may be speculative; it is speculative; but commercial transactions generally are more or less speculative, the speculative element in them varying mainly in degree.

The Two Sides of Speculation.—We have in the incident related of Lincoln's administration clearly set before us the two sides of this question of Wall Street speculation.

One side is plain enough. When we see the gamblers gambling on the hazards of the nation; when we see them swindling innocent investors by false prospectuses, deceitful advertising and manipulative schemes; when we see the market-place converted into a Monte Carlo, in which stalks the grinning skeleton of dishonor, moral degradation and suicide; when we see the gambling mania spread over a nation, making sober industry seem mean and contemptible and creating a morally unhealthy and economically unsound hunger and thirst after riches rapidly attained and a luxury that corrupts the foundations of civilization; when we see that out of these conditions spring the tempest and fury and awful collapse of panic with its resultant misery and poverty; when we see all these things, we are tempted to exclaim with Lincoln, "I wish that every devilish head of them could be shot off"; and we can in part realize the feelings of Christ when He whipped the money-changers out of the temple.

If this were all of Wall Street, then wipe it out. But there is something more in Wall Street than gambling. Every economic writer recognizes the fact that speculation is inherent in all commerce and is an indispensable part of the modern organization of business. The essence of speculation is risk, and risk is inherent in all commercial and credit transactions. If the taking of risks is immoral, then all trade is wicked. That in fact was once the universal belief. It may be truly said that to the medieval economist the merchant was a licensed robber, while the modern economist sees in him a public benefactor, except when he may be profiteering.

Value of Speculators.—The difference between speculators and other men engaged in business is not that the

former take risks and that the latter take no risks, but that the speculators specialize in risks; and the more risks the speculators take the less are the risks of the ordinary processes of commerce. In this fact is to be found one of the important uses of the speculative market. "In so far," says Professor Emery of Yale, one of the foremost authorities on this subject, "as we do away with business speculation, we make all business, whether in the purchase of commodities or the investment of capital, more speculative than it would otherwise be."

The facts in the case are simply but clearly stated by Hadley, who says:

> Every right-minded person must deplore the extent to which speculation is carried at the present day. But, side by side with the wrong side of speculation, which does much harm, there is a right kind of speculation which seems to be an absolute necessity for the successful and regular conduct of modern industrial life.

Balance Wheel.—Speculation is a part of the great system of distribution to which credit and transportation belong—it performs in its way the same service for the world that credit and transportation do. It facilitates the process of distributing products to consumers. Henry George likened speculation to a balance wheel, by which the whole machinery of industry is regulated.

We have, then, three basic facts to build our opinion and policy upon:

1. Speculation in its proper use is indispensable and beneficial to mankind.

2. The organization of speculation can be and is subject to gross misuses, the effects of which are evil, demoralizing and sometimes assume the proportion of national disaster.

3. Attempts to prohibit speculation by governmental action have generally resulted in doing more harm than good.

Thirty years ago Henry Ward Beecher was asked by a New York Legislative Committee what was his opinion of the moral effect of a speculative transaction. The answer he gave is the only answer that we can give.

"When it is done properly," he said, "I think well of it; when it is done poorly, I think poorly of it."

The speculative function of carrying credits or commodities from a period of lower to a period of higher prices, as expressed in the demands of the community, is a specialized risk-taking service (so long as it lacks the elements of monopoly) for which, if done at a reasonable cost, the community as a rule is willing to pay.

There is nothing immoral or uneconomic in the taking of risks. If it had not been for men willing and able to take great risks it would have taken a thousand years to have brought about the development of this continent which has been the achievement of only four centuries. But because risk is beneficent, that is no excuse for taking gambling risks, for modern experience demonstrates that gambling is not only wasteful, but demoralizing. But it is a justification for intelligent speculation; and every step one takes, every change one makes, every operation of business, large and small, is necessarily a speculation. Moreover, there is nothing wrong in speculation by the use of credit, for nearly all of the transactions of modern business are based on credit, as has already been indicated. But while stock speculation performs a large work, the beneficence of which is recognized by every leading economist, that is no reason why everybody may engage in it. The stock market is frequently crowded with people who have no business in it. Hazard-carrying is a specialized pursuit.

People Who Should Not Speculate.—Let us mention several classes of persons who should not enter into stock speculation:

1. Women. More and more women are entering into business and some of them display a high order of business ability. Moreover, every woman should be taught something of the proper use of money in investment. But women as a class should keep out of speculation. There may be, perhaps, half a dozen of them whose experience and ability and means justify them in speculating in stocks, but they are the exceptions. The first essential of a woman's investment of money is safety. That comes first, and there is no second.

2. All persons of limited capital and income. Because a person has saved $1,000, and that is 10 per cent. margin for the purchase of 100 shares of stock, that is no justification for the speculative purchase of such securities. The vast majority of wage earners, high and low, have not the time, the knowledge or the financial ability, for stock speculation, and this applies also to many professional men and especially to clergymen, doctors and journalists. A man who is continually watching the stock tape has little time left to watch his employers' or clients' business. The journalist, and especially the financial journalist, should keep out of margin speculation, for the very obvious reason that such operations are apt to warp his judgment and color his writings. The financial writer who is in the stock market is no longer a disinterested, unprejudiced observer of the stock market. The merchant who is in business for himself is fitted for speculation in stocks, but even he should be careful not to divide his interests by his stock market operations so far as to weaken his own legitimate business.

3. All trustees and custodians of other people's money should keep out of the stock market. Speculating with other people's money is one of the most dangerous temptations of modern times.

REFERENCES

"How to Invest Wisely," John Moody, 1919.

"Practical Investing," Franklin Escher, 1920.

"Investment and Speculation," Thomas Conway, Jr., and Albert W. Atwood, 1911.

"The Theory of Stock Speculation," Arthur Crump, 1901.

"Stocks and the Stock-Market," *Annals of American Academy*, May, 1910.

"A Plain Guide to Investment and Finance," T. E. Young, 1908.

"Relation of Speculation to Business," Collin Armstrong, 1908.

"Investments, What and When to Buy," R. W. Babson, 1908.

"Legislation Against Speculation and Gambling," T. H. Dewey, 1905.

"Speculation on Stock and Produce Exchanges," Henry C. Emery, 1904.

"Ten Years' Regulation of Stock Exchanges in Germany," Henry C. Emery, 1908.

"Economics" (Chapter IV), Arthur Twining Hadley.

"Speculation in Relation to World's Prosperity," M. T. England, 1897-1902.

"Cycles of Speculation," Thomas Gibson, 1907.

"Pitfalls of Speculation," Thomas Gibson, 1909.

"The A. B. C. of Stock Speculation," S. A. Nelson, 1904.

"Safe Methods in Stock Speculation," Wm. Y. Stafford, 1902.

"How to Read the Financial Page," Scribner Browne, 1920.

CHAPTER VII

VALUES AND PRICES

Every reader of the financial page of a daily newspaper—and there is no other page more frequently consulted—is familiar with the table of figures a column long, headed "Sales at the New York Stock Exchange," or "Quotations for Stocks." This table is generally presented as follows:

Sales Shares	Stocks	Opening	High	Low	Close	Net Changes
32,610	Amalgamated Copper	62	64	62	64	$+3\frac{1}{8}$
21,200	Lehigh Valley........	$179\frac{1}{4}$	$179\frac{5}{8}$	$178\frac{1}{2}$	$179\frac{1}{4}$	
40,100	Reading.............	$151\frac{1}{4}$	$151\frac{3}{4}$	$150\frac{1}{2}$	$151\frac{3}{4}$	$+1$
11,100	Third Avenue........	$12\frac{3}{4}$	$12\frac{3}{4}$	$9\frac{5}{8}$	$9\frac{7}{8}$	$-2\frac{5}{8}$
31,800	Union Pacific........	$173\frac{1}{8}$	$174\frac{1}{8}$	$173\frac{1}{8}$	174	$+1\frac{3}{8}$
90,300	United States Steel..	63	$63\frac{3}{4}$	63	$63\frac{3}{4}$	$+1\frac{1}{8}$

This is an abbreviation of one day's quotation list. The first column gives the number of shares sold; the second the name of the stock; and then follow the opening, highest, lowest, and closing prices of the day. The last column shows the net change for the day, namely, the difference between the closing prices of to-day and yesterday. The plus sign signifies an advance; the minus sign, a decline; no sign, that the price remains the same. For instance, on this day, 32,610 shares of Amalgamated Copper were sold. Its opening price was $62 a share; its highest price was $64; its lowest, $62; its closing, $64. This closing price was three dollars, twelve and one-half cents a share higher than the closing price of the day preceding. Now, it does not follow that because only

four prices are quoted in this list that there were only four prices during the day. On the contrary, there were possibly a hundred different transactions in this stock, and thus a hundred prices. Every sale made during the day is recorded by the stock-indicator, or ticker, but most papers give only a summary, showing the opening, highest, lowest and closing prices.

Phenomena of Price Changes.—To an outsider the phenomena of sudden changes in prices, even in one day, seem an insoluble mystery; and even the Wall Street expert is often puzzled to account for the frequent and wide divergence of prices and values. Why, it may be asked, should such a stock as Reading sell as high as 151¾ and as low as 150½ in one day? Surely, the difference of 1¼ in price could scarcely represent any corresponding change in the earning power of the road. Frequently prices fluctuate far more widely than that. A difference of $10 and even $25 a share may occur in the price of a stock in two or three hours. In the spring of 1902, American Power broke from 198 to 120 in one day, and in the Northern Pacific corner the common stock of that railroad advanced several hundred points to 1,000. How wide the fluctuations may be in the course of a year is indicated in the following selection from the quotation list of 1919, giving the price changes of two industrials and four railroad stocks:

1919	High	Low
Anaconda Copper	77⅞	54⅝
Atchison	104	80½
St. Paul	52¾	34⅛
Reading	93⅝	74
Union Pacific	138½	120¼
United States Steel	115½	88¼

Even a superficial observer realizes the absolute inconsistency that often exists between values and prices. Logically, the price of a stock ought to be identical with

its true value. In fact, the two are often widely separated. A dividend-paying standard stock of international reputation like St. Paul sells at one hundred different prices in the course of a day or week, and in the course of a year, as has been seen, the difference between the highest and lowest prices may be $50 a share. Is there an adequate explanation of this mystery? We are now face to face with one of the fundamental problems of the stock market.

This difference between intrinsic values and market prices is, however, by no means confined to Wall Street, although it is more strikingly exhibited there. A man owns a house from which he derives a net income of $1,000. The house is worth, say, $20,000, and the income of $1,000 is 5 per cent. on the investment. But if he had to sell the house quickly he might not find a ready purchaser, and would have to sacrifice the property, say, for $10,000. There has been no change in the actual worth of the house. It is in as good a condition as before, and the income continues, but the price is 50 per cent. of the true value. Or the owner of the property may find that a corporation wants it for some important purpose, and is willing to pay a big price for immediate possession. In this case an urgent demand has advanced the price, although there has been no change in income. Let us carry the illustration further. Suppose the corporation wants the property, but wants it cheap, and is willing to wait a while for it. Thereupon it begins to manipulate the market for real estate in that vicinity, and by various expedients impresses the owner with the belief that the prices of property on the street are likely to decline, and that he had better sell for what he can get now than wait and perhaps do worse. There has been no change in value as measured by income, but manipulation has changed the

price. Apply all this to stocks, and an idea is formed of the conditions that produce the often startling differences between values and prices.

If prices always represented value it would seem as if stocks paying 4 per cent. dividends would sell practically at the same prices; those paying 5 per cent. at higher prices, and so on. That this is not always the rule is shown by the following table, giving the yearly dividends in 1919, and the highest prices of that year of a number of well-known stocks:

1919	Dividends	Highest Price
Anaconda Copper ($50)	$4\frac{1}{2}$	$77\frac{7}{8}$
Western Union	7	$92\frac{1}{2}$
American Smelting	4	$89\frac{3}{4}$
Consolidated Gas	7	$106\frac{3}{8}$
United States Steel	6	$115\frac{1}{2}$
New York Central	5	$83\frac{3}{4}$
Baltimore & Ohio	4	$55\frac{1}{4}$
Pennsylvania ($50)	6	$48\frac{1}{2}$
Reading	8	$93\frac{5}{8}$
Southern Pacific	6	115
American Sugar	10	$148\frac{3}{8}$
Canadian Pacific	10	$170\frac{7}{8}$
Louisville & Nashville	7	$122\frac{3}{4}$
Northern Pacific	7	$99\frac{7}{8}$
General Electric	12	176
Pullman	8	$132\frac{1}{2}$
New Jersey Central	12	213
Union Pacific	10	$138\frac{1}{2}$
Missouri Pacific	None	$38\frac{7}{8}$

Difficult to Reconcile.—It is not easy to reconcile these differences. Here we have a non-dividend payer selling for half as much as a four per cent. dividend stock, a seven per cent. stock selling for less than a six per cent. stock, one ten per cent. stock selling at $170\frac{7}{8}$ and another for $138\frac{1}{2}$, almost one-fifth lower. It seems evident, however, that prices, while controlled by intrinsic value up to a certain point, are subject also to certain conditions that do not appear to affect values in the least.

What Constitutes Value?—In the case of a bond its value is measured:

1. By its rate of interest.
2. By the date of its maturity.
3. By the nature of the security pledged for the payment of the principal.
4. By its marketability.
5. By the supply of money seeking investment.
6. By the character of the industry.

In the case of a common stock, value is measured:

1. By the dividend it pays.
2. By the net income of the company after payment of fixed charges and operating expenses, all such net income belonging to the stock.
3. By the character of the management, on which in large measure depends the continuance of dividend payments.
4. By its prospective earning capacity, competitive position, etc.

What Makes the Price?—By price, of course, is meant the sum of money for which a stock or bond is sold in the market. Price, strictly speaking, should be value expressed in dollars, and quotations are prices as recorded on the tape or in the market report. The chief influences that make prices are:

1. Intrinsic value.
2. Current news, which may not affect real values in the least, but which Wall Street thinks may enhance or injure values.
3. The condition of the market machinery for speculation. For instance, stringency in the money market may not affect the earning power of a company in the least, but may temporarily affect the market price of its stock.
4. Manipulation, or the fine art of making prices what

the manipulators want them to be, independent of what they ought to be.

5. The market supply of the stock for speculative purposes.

Wall Street is always striving to discount the future, and much of the mystery that surrounds this question of price is cleared up by keeping in mind the fact that the price represents what the Street thinks to-day will be the values of to-morrow or next month or next quarter. Often prices, while at variance with present values, accurately represent future values. Quite as often they do not.

In the case of a railroad stock, its dividend-paying power depends upon the state of trade, the size of the crops, the character of the country through which the road runs, and also in no small degree upon the skill and honesty of its management. The rate of dividend may therefore change greatly from year to year. Take the case of even such a standard stock as that of the New York Central. From 1869 to 1884 it paid 8 per cent., but in 1885 it dropped to 3½ per cent.; from 1886 to 1889 it paid 4 per cent.; the next two years 4½ per cent.; in 1892, 5½ per cent.; the next two years 5 per cent.; in 1895, 4¼ per cent.; the next three years 4 per cent.; in 1899, 4 per cent.; in 1900 and 1901, 5 per cent. Since 1901, it has fluctuated between 5 and 6 per cent., reaching the latter rate in 1907 and 5¾ in 1910, later declining to 5 since 1911, prices ranging meanwhile from 121½ in 1912 to 66¾ in 1919.

Uncertainty Breeds Speculation.—It is the uncertainty which attends the business of the great corporations that makes their stocks so attractive for speculative purposes and their prices fluctuate so widely. It follows that if two 4 per cent. stocks sell at different prices, it may be because, first, there is a real difference in their prospects of future rates of net earnings; or, second, they are subject to differing influences that affect prices and not true values,

for it may happen that two stocks of equal value may sell at different prices at the same time. Prospective conditions often unsettle prices.

The average prices of the entire list may, for a considerable period, vary greatly from the true measures of value. Inasmuch as values depend on the prosperity or the reverse of the country, it ought to follow that Wall Street prices should correspond to the actual conditions of trade. This is always true if the period of comparison be made long enough, but it is not always the case for short periods, and sometimes not for a year at a time. For one thing, the stock market is often ahead of the rest of the country, inasmuch as it strives to discount future conditions, so that an advance in stock values may precede a boom in business, and prices actually waver and decline by the time the activity in trade has reached its height. In like manner a stock may decline on good news, for the reason that the good news had already been discounted by a preceding advance in price.

Manipulation.—But another cause may make one stock or group of stocks, or indeed the entire market, swerve from the line of value. That cause is manipulation. There exists in Wall Street, as has been seen, a class of professional speculators who make the stock market their life study and business. These men base their operations, or try to, on values as measured by income, but they study value so as to be able to buy at less than value, and then they work to sell at as much more than value as they can get. They employ every means in their power to make stocks attractive to investors and other possible buyers when they are long and want to sell; or to make the market appear doubtful or dangerous when they are short and want to buy. It has already been shown how large a part in the market manipulation sometimes plays. For days, weeks, and sometimes for months, prices may rep-

resent transient influences more than they do intrinsic value.

The Dow Theory.—Various attempts have been made to construct a scientific theory covering this whole subject of values and prices. The most satisfactory of these is that evolved by Charles W. Dow. His theory is based on the unmistakably sound principle that, in the long run, prices are controlled by values. He discovers three distinct movements of prices in progress so far as common stocks are concerned, namely:

Primary.—This is governed by intrinsic values, and is the most powerful of the three.

Secondary, or, as Mr. Dow calls it, the "swing."—This is governed by manipulation and by current events temporarily affecting actual values and the market machinery. These include seasonal conditions.

Tertiary.—The daily fluctuations.

Trifling causes, a mere rumor, the operations of room traders, may and often do control the price fluctuations of a day. The concerted operations of great operators may, and often do, control the price movement of weeks and months. But the primary movement, that based on value, lasts the longest, and is ultimately the controlling factor in speculation as in investment.

The primary movement lasts generally from four to five years. Thus, there was the bull movement of 1877 to 1881, accompanying the resumption of specie payments and ending in the assassination of Garfield. This was followed by the bear movement of 1881 to 1885, including the panic of 1884. Then there was the bull movement of 1885 to 1889, when the sequence was broken by the Baring panic of 1890, followed quickly by an upward movement due to the large harvest of 1891 and a currency inflation. But the regular sequence was resumed in 1893, when the panic set in, the various effects of which continued until 1897. Then began

the great McKinley boom, based on sound money, large crops, and heavy gold production, which lasted until the panic of 1907, with two or three interruptions. Now, in all of these movements the ultimate prices approached very closely to intrinsic values. But in every one of them there were long periods of time when the secondary movement—or inflational swing—was at work, and prices varied greatly from values, only to return to value levels later.

Inflation and Prices, 1914-1920.—Currency and price inflation of this kind occurred during the war-time period of 1914-1919. It has been shown that between March 1, 1913, and 1920, paper money circulation increased 87.5 per cent., while the metallic reserve increased only 17.7 per cent., and the price level was 56 per cent. higher in February, 1920, than in April, 1917, when the United States entered the war. Currency inflation resulted in doubling the bank deposits between 1914 and 1919. This was facilitated by government bonds issued at rates of interest far below the market rates and then utilized as collateral for bank paper loans. In the industrial stock boom which accompanied this upward trend of inflation of prices, twenty-five industrials rose from an average level of 85 on July 1, 1918, to 139 in November, 1919, a year after the Armistice.

Then, as in the McKinley boom, the prices of industrials, for the whole period of the movement in view, were paralleled by actual gains in value; but the advances in prices were accompanied by remarkable fluctuations. The boom begun in August, 1896, when Wall Street's fear of Bryan's election on a free-silver platform came to an end, reached its climax at the time of the Northern Pacific corner and panic of May 9, 1901. During this period of nearly five years the lowest average price of 20 railroad stocks was less than 42, and the highest average price was nearly 118 on May 1, 1901, a difference of 76, the percentage of advance being 180. This upward movement corresponded

very closely to every possible test of value. For instance, bank clearings in New York in this period increased 175 per cent.

But in the case of railroad stocks the best measure of value, as has already been indicated, is the surplus earnings after all expenses, taxes, and bond interest have been paid. The rest belongs to the stock. A calculation shows that the dividend-producing capacity of all the railroads of the United States in the period under review kept pace with this advance in prices. An analysis of the Interstate Commerce Commission reports for the years ending June 30, 1896, and 1900, shows that the net income applicable to dividends increased per mile from $492 to $1,180. The dividends actually paid increased from $484 to $725 per mile. Statistics covering exactly the period of the stock boom would show a still greater rate of increase. These figures are sufficient, however, to indicate how, in a period of five years, the line of price held true to the line of value.

Conditions of Success.—The speculator, therefore, who studies most closely the conditions that create real value, and bases his operations on what this study of values reveals, is most likely to achieve success. A man died several years ago worth millions of dollars made through operations in copper, coffee, and ostrich-feathers—a strange combination, truly, but his success does not appear strange when it is known that he and his partners made the most exhaustive study of these three products, so that there was nothing worth knowing about them that they did not know. The reason why so many lose money in Wall Street is that they do not base their operations on values, but on chance or "tips," and they are swept out of sight either by the daily fluctuations or by the still more enduring and more powerful "swings." The secondary and tertiary movements of prices far more than the primary are responsible for the failures of Wall Street.

In this very McKinley boom, when, as has been seen, the five years' difference between the lowest and the highest prices was 76 points, prices actually traveled over a course of 271 points. There were 15 great movements and swings upward and 14 swings downward, the lines of prices continually doubling upon themselves. These swings were of varying durations. Some lasted only for days, and some for months. The period between April, 1899, and July, 1900, was one of continuous advance in the income capacity of the railroads, the increase being from $875 per mile in the fiscal year of 1899 to $1,180 in the fiscal year of 1900; and yet this was in the main a period of falling prices.

For more than a year, therefore, the line of price separated from the line of value. Overproduction of industrial securities, the sudden death of Ex-Governor Flower, then the bull leader, and the opening of the Boer War, involving the closing of the Transvaal mines, and the presidential election, were mainly responsible for this separation. But the influence of value reasserted itself as soon as the Street recovered from the chill of these events, and prices soon regained all the ground they had lost.

The investor can afford to base his operations entirely on value, but the speculator, to achieve success, must not only make a deep study of values, but also learn to calculate upon the force and duration of these market swings. Even the student of value may make mistakes, for it should not be forgotten that speculation is always discounting the future, and is trading on values to be established rather than on values that are already established. This accounts for the familiar phenomenon of a stock declining on a piece of good news. That is because the advance has preceded the good news—in other words, discounted it. The insider, or the far-sighted outsider, has foreseen the favorable development and bought in advance of the news.

Then when the thing develops and the news is announced he sells to realize his profit, thus causing a decline.

Law of Averages.—An analysis of the stock market reveals a mysterious law of averages. The great primary movements based on value run in about equal periods of boom and depression. One upward sweep is followed by a downward sweep of about equal length.

There have been constructed in Wall Street elaborate charts or systems by which it is claimed the course of prices can be infallibly foretold. Men who use these systems as a substitute for close study and sound judgment of conditions are as much fools as the young nobleman who some years ago constructed a system for "breaking the bank" at Monte Carlo, and succeeded in only breaking himself. But not a few houses of high standing have charts showing the course of prices through a series of years, and use them as the man of business uses statistics. They have the advantage, for one thing, of showing at a glance whether prices are high or low as compared with preceding periods. It has been shown in the preceding chapter how in the course of ten years the sales of the bear periods have almost balanced the sales in the bull periods. A chart has been made of those ten years fashioned like a checkerboard, in which the bull periods have been left white and the bear periods made black, and it is remarkable that the number of months, almost the number of weeks, of advancing prices equals the number of months and weeks of declining prices. Prices, therefore, have a tendency to return to the point whence they started. In the course of a year there is apt to be two bull and two bear periods, and the two highest points and the two lowest points are generally about six months apart.

"Wall Street," said Jay Gould, "is like the ocean. No one man can control it. It is full of eddies and currents. The thing to do is to watch them, to exercise a

little common sense, and on the wave of speculation to come in on top."

The Woodlock Statement.—In an address before the New York University School of Commerce, Accounts and Finance, Thomas F. Woodlock said of security prices:

A. The general trend or tide of prices is determined by fundamental values.

B. This tide is constantly interrupted by eddies which are the result of conditions growing out of speculation and accidents.

C. The eddies in the tide are usually swifter than the movement with the tide.

D. The eddies usually bear some suitable proportion to the movement that has preceded them.

E. As a general rule declines are accomplished more rapidly than advances (because most speculators operate as "bulls").

It is evident that while the chapter of accidents is never done, the movement of prices is by no means so irregular as to be incapable of a certain amount of foresight, and that speculators who bear the above principles in mind, and operate on them, cannot be accused of being mere gamblers. In other words, stock speculation is not of its nature wholly unscientific.

REFERENCES

"Elements of Successful Investing," Roger W. Babson, 1912.
"Principles of Bond Investment," Lawrence Chamberlain, 1911.
"Simple Principles of Investment," Thomas Gibson, 1919.
"Influences Affecting Security Prices and Values," Thomas Gibson, *Annals of American Academy,* May, 1910.
"Dow's Theory of Stock Speculation," New York, 1920.
"How to Select Investments," Lohnhaupt and others.
"The A. B. C. of Bond Buying," G. C. Selden.

CHAPTER VIII

THE STOCK COMPANY

If there were no stock companies there would be no stock markets. The stock certificate, representing as it does present or prospective income, is therefore the very corner-stone of modern business.[1] A stock company is an association incorporated under the laws of some State, or by the direct act of some legislature, for the purpose of transacting business. It is composed of a number of persons who share in its capital and whose interests in its profits are represented by shares of stock. The company gives each stockholder a certificate showing how many shares he owns.

Advantages of the Corporation.—In a legal sense the corporation is a person, with the same powers that a person possesses to act and to sue. Yet the persons who compose the corporations have, individually, no control over it or rights on the property it may own. A contract made with a corporation is not made with the stockholders individually. The corporation, therefore, is a person without personality. Hence the aphorism that "corporations have no souls."

Formerly nearly all business was conducted by indi-

[1] I weigh my words when I say that, in my judgment, the limited liability corporation is the greatest single discovery of modern times, whether you judge it by its social, by its ethical, by its industrial, or, in the long run—after we understand it and know how to use it—by its political, effects. Even steam and electricity are far less important than the limited liability corporation, and they would be reduced to comparative impotence without it.—NICHOLAS MURRAY BUTLER.

viduals or by firms. Now, however, the tendency is to convert all lines of business into stock corporations. A company presents many points of advantage over a partnership, not the least being that it gives continuity to a business. It secures what is called a perpetual succession. A partnership usually expires by limitation in a certain number of years or by the death of a partner. A company goes on without a break. It may be difficult to divide a business at the expiration of a partnership or at the death of one of the partners, but the death of a shareholder causes no interruption to the business of a company, and the interest of the deceased is easily transferred to his heirs or sold in the market and the proceeds divided among them. Moreover, the shareholders have the great advantage of limited liability. That is to say their liability is no greater than the amount they put into the enterprise, or voluntarily assume.

Another important advantage of a company is that it provides a convenient method of aggregating capital so as to be able to conduct business on a large scale. A man with $10,000 is incapable of any extended enterprise, but 100 men with $10,000 each represented in a stock company give a capital of $1,000,000. A firm with 100 partners would be a monstrosity; but a company with 100 or 1,000 stockholders is easily and effectively managed.

Par Value.—The capital stock of the company is divided into denominations of a certain specified par value, as, for instance, $5, $10, $50, or $100. Shares of $100 each are the rule in the companies represented in the Stock Exchange, although there are notable exceptions, Reading stock, for instance, being divided into shares of $50 each, and there are stocks, like the Great Northern Ore Certificates, which have no par value, but which simply represent equal shares in the property and its profits, and which are worth exactly what they sell for in the market.

The Railroad Securities Commission appointed by President Taft strongly favored the elimination of par value as a cause of confusion to investors and of bad legislation. In its report, the Commission says:

> We do not believe that the retention of the hundred dollar mark, or any other dollar mark, upon the face of the share of stock, is of essential importance. We are ready to recommend that the law should encourage the creation of companies whose shares have no par value, and permit existing companies to change their stock into shares without par value whenever their convenience requires it. After such conversion any new shares could be sold at such price as was deemed desirable by the board of directors, with the requirement of publicity as to the proceeds of the sale of such shares and as to the disposition thereof; giving to the old shareholders, except in some cases of reorganization or consolidation, prior rights to subscribe *pro rata*, if they so desired, in proportion to the amount of their holdings.
>
> As between the two alternatives of permitting the issue of stock below par, or authorizing the creation of shares without par value, the latter seems to this Commission the preferable one. It is true that it will be less easy to introduce than the other, because it is less in accord with existing business habits and usages; but it has the cardinal merit of accuracy. It makes no claims that the share thus issued is anything more than a participation certificate.

This same suggestion was made years go by the eminent corporation lawyer and publicist, Edward M. Shepard, but the official endorsement of President Taft's Commission gives it increased force. More than a third of listed industrials are now no-par shares.

The Promoter.—In the formation of a new company, the "promoter" comes first. Many imagine the promoter to be a recent development of Wall Street. He has, indeed, enjoyed special prominence in the last few years, because of the immense number of new companies organized, but he has existed in one form or another for centuries.

Of course, the history of no two companies is exactly

the same. But if a great industrial company is proposed, the promoter may, in general, be said to follow one of two lines of procedure. He may interest the different manufacturers in a certain line of trade and induce them to combine, and if successful in forming a combination, he may be rewarded with a large interest in the new company. Or, being satisfied that such a combination would be profitable, he may obtain options for the purchase of the different plants. An option is the payment of a certain sum of money for the right to buy a plant or business, or any other thing of value, within a specified time and at a specified figure. If the option is not used within the time limit the promoter loses the sum he paid for it.

The Underwriter.—Whatever line of procedure is adopted, the next step is to secure the backing of some banking-house, the larger and more influential the better. The banker looks into the scheme carefully, and with the aid of experts and accountants examines the different plants, surveys the proposed field of operations, and ascertains the present and prospective demand for the product to be marketed. If satisfied that the scheme is a feasible one, the banker undertakes to underwrite it—in other words, to supply the money necessary to effect the combination, organize the company, and to market the securities.

The Corporation Lawyer.—At this stage the corporation lawyer is called in. He attends to all the legal matters involved in the transaction, advises as to the State the company should be incorporated in, draws up the necessary papers, and sees that no laws are violated and that every legal requirement is observed. The plan of the company has probably been laid out by the promoter, and is now adopted as amended by the banker and his lawyer. The amount of capital is determined, and the division of capital into stocks and bonds is fixed upon.

The Syndicate.—Then comes the underwriting syndicate. The banker may be unable or unwilling to provide all the immediate cash required and assume all the risk, so he calls in other bankers and capitalists and a syndicate is formed. The company having been incorporated, it is likely that after the persons originally concerned in its organization have taken a proportion of the stock, a considerable amount, and perhaps nearly all, remains to be sold to the public. The banker, if his reputation is high and his connections wide, is usually able to attend to this. His indorsement may commend the securities to investors. But sometimes the services of a stock-market manipulator are required in order to prepare the market to absorb the new supply of stocks and bonds. In order to market these, it is necessary to have them listed in the Stock Exchange. Before this can be done they are probably traded in on the curb. The new securities now get into the hands of the broker, pass through the Stock Clearing-House, are hypothecated for loans at the banks, and finally reach the investor, who locks them up in his safe-deposit vault and waits for the interest and dividends.

The progress of a certificate of stock from the producer to the consumer, from the organizer to the investor, may be summed up as follows:

1. The promoter.
2. The banker.
3. The corporation lawyer.
4. The underwriting syndicate.
5. The incorporation.
6. Issue of stock certificates.
7. The stock-market manipulator.
8. The curb market.
9. Listed on the Stock Exchange.
10. The stock-broker.
11. Hypothecated for loans at the bank.

12. The investor.

In the case of railroad, gas, or other companies requiring public franchises other steps have to be taken. To build a railroad, the sanction of commissions, courts, and legislatures must be obtained.

Before 1892 the majority of companies were incorporated in New York, but for many years New Jersey incorporated more big corporations than any other State.[2] Nearly one-half of all the large industrial companies represented in the Stock Exchange have New Jersey charters, including the greatest corporation ever formed, namely, the United States Steel Corporation, with a capital of $868,583,600 stock and $568,899,084 bonds. The Northern Securities Company, with $400,000,000 capital stock, controlling other companies having $642,000,000 of outstanding bonds, was also a New Jersey corporation, but was declared a violation of the Sherman anti-trust law. The laws of that State are exceedingly liberal to corporations. The New Jersey company is required to maintain an office within the State, this office to contain a stock transfer book and a stock ledger, and to keep open in business hours for the transfer of stock; and the annual meetings of stockholders must be held there. But the company may do a business in any part of the world. Its directors may have their office in Wall Street, and its factories may be in Boston and San Francisco.

Moreover, the articles of incorporation, if well drawn

[2] Of the 351,426 corporations reporting in 1917 to the Commissioner of Internal Revenue, New York had 46,144, Pennsylvania 20,834, Illinois 22,389, California 18,369, Ohio 17,615, Missouri 14,840, Massachusetts 13,799, Wisconsin 11,923, and New Jersey 10,112, but New Jersey is the home of the big holding companies. William J. Gaynor, declaring that five-sixths of the trusts were incorporated in New Jersey, argued that a repeal of its law giving life to holding companies would solve the trust problem. Edward S. Mead's "Corporation Finance" and John J. Sullivan's "American Corporations" give adequate accounts of the sweeping powers of the New Jersey corporations. No other States had so many as 10,000.

by a competent lawyer, can give the company power to engage in almost every line of business. It may manufacture carpet-tacks, finance trusts, and operate railroads. Unless otherwise indicated, the company becomes a perpetual corporation.

If stock is to be issued for plants or other property, the promoters can put any value they please upon the property, and authorize the issue of stock in payment; and the State of New Jersey accepts this valuation without question. This makes stock watering easy. Only three incorporators are needed, and two of these may be dummies, and the interest of all three in the concern may not be more than $1,000. On payment of an incorporation fee, and with an initial investment of only $1,000, three men can in one day incorporate a company in New Jersey with powers to do almost anything and everything under the sun. It is not surprising that New Jersey grew rich incorporating "holding" companies.

Other states, notably Delaware and West Virginia, soon liberalized their laws of incorporation. Finally, in 1913, the New Jersey Legislature began to correct some of the mischief done, by enacting the drastic "seven sisters" act against trusts. Meanwhile Federal legislation relieved the States in enacting remedial measures, although 22 States enacted "blue-sky" laws in 1912-1913, owing mainly to the failure of stock exchanges to protect the investing public against unworthy security sales.

The Trust.—James B. Dill, the well-known lawyer, who was noted for the number of companies he incorporated, strongly recommended Federal incorporation by national Charter to bring State-incorporated companies under a necessary amount of governmental supervision. Federal control has since taken different forms, such as the Clayton Act (1914) restricting interlocking directorates, intercorporate stockholdings, etc., and the Federal Trade Com-

mission to exercise administrative control over competitive practices.

A trust, in the true sense of the word, is a combination of companies, the majority stockholders of which assign their shares to a certain number of trustees, giving them an irrevocable power of attorney. This effective form of combination has gone out of existence, having been declared illegal under the Sherman anti-trust law. The Standard Oil Corporation used to be a trust of this kind, but afterwards became a regularly organized holding company, which was also declared illegal in 1911 and dissolved.

Later Trust Status.—Later decisions of the United States Supreme Court have seemed to diverge somewhat from the Standard Oil and Tobacco decisions. In those cases conduct toward other elements of the trade conducive to monopoly was made the occasion of dissolution. Objectionable tactics, rather than size, tended to eventuate in effective combination and eliminate competition, and these were what made the large-scale industry obnoxious to the law. Conversely, fair and enlightened treatment of other competing elements, on the part of the United States Steel Corporation, and demonstrating its positive economic value to industry as a whole, saved it from dissolution in the decision of March, 1920. That is, a colossal consolidation need not necessarily prove itself a combination in restraint of trade, but may actually become a necessity in international competition, as provided for under the Webb and the Edge Acts.

Holding Companies.—Holding companies are a comparatively recent discovery, but there are several that have been in existence for many years. This scheme of combination was brought into special prominence by the organization of the Northern Securities Company for the purpose of holding the stocks of the Great Northern and

Northern Pacific Railroads, which was judicially declared to be illegal. The holding company is an effective agency for the promotion of monopoly, and yet it has been used for effecting beneficial consolidations that did not create monopolies.[3] The chief objections to the holding company are summed up by the Railroad Securities Commission as follows:

> Any artificial stimulus to these intercorporate holdings is a public evil. Where a railroad controls the operations of another railroad by owning a majority of its stock, or where a holding company controls the operations of several roads in the same manner, we have all the disadvantages of consolidation, without getting all of its advantages. We get the centralization of financial power; we do not get all the economy of operation which should go with it. Apart from this general danger, we open the way to several specific evils.
>
> Where a railroad controls the operations of another road by the ownership of a majority of its stock, there is constant danger that the minority holders will not be fairly treated. The road thus purchased has become part of a large system, and is operated by the representatives of the whole system. It is almost certain that the advantage of the whole will be preferred to the separate interests of the part in matters of operation, traffic and finance.
>
> Again, the existence of two or more companies under the same management, having separate organizations but united control, invites the concealment of financial transactions by the shifting of charges from one company to another.

Change in Meaning.—It is thus seen that the meaning of the word "trust" has changed.

First, it meant a number of formerly competing companies combined by means of a limited number of individuals acting as trustees.

Second, it meant the same combination effected by means of the control of the different companies being owned by a holding company.

Third, it now practically means any big corporation

[3] See Hughes Report (1909) under "Holding Companies."

which has acquired great wealth and power so as to exercise what amounts to an overshadowing influence in any given trade.

Stock Watering.—In the organization of companies several evils have developed, one being "stock watering." This is the very felicitous Wall Street term for fictitious capitalization. It has been said by bankers who ought to know that large industrial companies have been so vastly overcapitalized that the common stock represented "water" or no actual investment, and that only the preferred stock represented actual investment. This assertion seemed to be confirmed by Bulletin 122 of the census of 1900. This gave the amount of stocks and bonds actually issued by 183 industrial corporations, covered by its report, as $3,085,200,868, while the true value of the capital invested is only $1,458,522,573. The preferred stock of these companies was $1,066,525,963, slightly less than the true value.

Capitalizing Earning Power.—In capitalizing a new combination the usual rule was to capitalize the earning capacity rather than the money actually invested in the plant. For instance, if the actual cost of a plant was $1,000,000, while its earning capacity is $300,000 a year, it might not be capitalized at cost, which would yield 30 per cent. dividends, but at, say, $3,000,000, which would yield 10 per cent. It may be said in justification that, while the plant may have cost only $1,000,000, its true value should be measured not by what it cost, but by what it earns, and that the capitalization of $3,000,000 therefore represents value, not water.

Capitalizing Possibilities.—But in many instances the plant is capitalized not on the basis of what it earns, but what it might, could, or should earn, and that in addition the capitalization is swelled by the bonuses demanded by the promoters and bankers. James B. Dill, in writing

on this subject, has shown how plants worth, say, $5,000,000 may be capitalized for $30,000,000, the difference representing in no sense of the word true value, but simply the water injected into the enterprise, just as the dishonest dairyman waters his milk. Then, says Mr. Dill, the promoter and the banker sell their stock for what it will bring, and the company is left in the hands of stockholders with immense charges to pay on watered stock. Mr. Dill said that this evil could be prevented by a law like that existing in England, which prohibits any promoter or company to advertise the capital stock for sale without stating the actual amount paid into the company.

The industrial commission appointed by President McKinley recommended that all the States enact laws to prevent stock watering like those existing in Massachusetts. It was shown by evidence produced before this commission that some trusts have been financed on this basis: For every $10 of cash or tangible property secured $60 of stock was issued, representing $15 to the promoter, $20 to the seller entering the combination, and $25 to the underwriting syndicate.

Corporation Problem.—In view of the enormous contribution limited liability stock companies are making to the civilization of the world, and of the opportunity they give of abuse of power, the question of their proper promotion, organization, size, capitalization and administration has become one of the gravest problems in this country at the opening of the twentieth century. The future of American business depends upon a solution that will preserve the coöperative advantages of stock companies without the danger of their becoming more powerful than the governments which grant them their privileges. That solution must be worked out by those who comprehend both the inestimable benefits and the necessary limitations of coöperation in accomplishing the world's work.

As an aid to solution, it may be useful to recapitulate the chief benefits and the chief evils of stock companies.

Benefits.—1. Coöperation: By bringing a multitude of capitalists together in the advancement of a single enterprise.

2. Efficiency: By creating an organization strong enough to engage in big competition.

3. Economy: By eliminating many of the wastes incident to "individual, cut-throat, parochial competition."

4. Limited liability: By which many individuals may become partners in an enterprise without risking more than they individually put into it.

5. Continuity: By establishing a corporation, the continued existence of which does not depend upon the life of any one engaged in it.

6. Diffusion of wealth: Which is made possible by the shares of stock, so issued as to make investment easy, even for persons of small means.

7. Concentration of control: By which it is only possible to secure the highest effectiveness of administration.

8. Democracy: Because the stock company is organized like a republic, and is based upon the right of suffrage, stockholders being the citizens of the corporation; and because in a stock company everybody is an employee; and therefore with the rapid substitution of stock corporations for individual and partnership business, the old distinction between capitalist and laborer is gradually eliminated, for everybody becomes at once capitalist and wage earner.

9. Mobility of capital: By the ease, convenience, and safety, with which capital can be transferred from one owner to another, by means of the negotiable stock certificate and by the admirable simplicity of stock-market methods.

10. Measure of value: Because the market price of a

stock certificate constitutes the best attainable method of valuation; and every owner of a listed security knows what he can get for it by sale, or as security for a loan.

Defects.—1. Impersonality: The stock company is a sort of legalized person without personality, hence the saying that "a corporation has no soul." There is a large measure of truth in the statement made by Rabbi Wise that "business which has become too largely impersonal, needs to be repersonalized"; so that, as Thoreau says, "a corporation of conscientious men shall be a corporation with a conscience." To that fine ideal we are approaching more speedily than many people imagine, for too many of us are apt to think the worst rather than the best of existing institutions.

2. Monopoly: Undoubtedly the stock company makes monopoly easier of attainment, and the holding company, although not always a monopoly, has become the convenient tool of monopoly, which is odious to the Anglo-Saxon ideal of liberty and equality of opportunity.

3. Power: It has been said that concentration promotes effectiveness of administration and ability for great conquests in commercial competition. But concentration constitutes power; and although the stock company derives its authority and rights from the government which incorporates it, it may, by its accumulation of capital, attain a power mightier even than that of the State. There are several corporations in the United States which are greater than most of the States of the Union. This power even when wisely administered and when, as is generally admitted, it vastly promotes the ability of this country to compete effectively in the markets of the world, excites envy among the envious and fear among many good people, and this gives rise to misunderstanding, political controversy and commercial distress. There is, therefore, the

peril of business bossing the government, or of the government bossing business, either of which is bad.

4. Oppression: As in the exercise of all power, so in the administration of the stock corporation oppression has been made possible, because, with stockholders scattered over a wide territory, it is difficult to organize them for effective oversight of their business, so that directors may exercise too arbitrary an authority. In England stockholders' meetings are largely attended and constitute effective corporation parliaments. Not so in the United States. But this defect is being rapidly overcome by the extension of publicity, not only that enforced by governmental action, but also by the voluntary action of big companies, which are steadily improving in the character, fullness and timeliness of their regular reports so that stockholders and investors may be well informed.

5. Par value: By which a confusing and mischievous distinction is raised between normal capitalization and market price.

6. Criminal promotion: A lot of financial "crooks" use the stock company as a burglar's jimmy in order to get hold of other people's money. How convenient it is for them to organize a bogus company with a fictitious capital, a flamboyant prospectus, and a lying advertisement, and proceed to induce foolish capitalists to part with their money for a piece of engraved but worthless paper! It was recently estimated that upwards of $100,000,000 a year is taken in this way out of the pockets of the small savers in this country. Is it any wonder that this causes many unthinking people to attack the stock company and the stock market, being unable to distinguish between what is good and what is bad, between the beneficent use, and the incidental abuse?

Organization.—The control of a company is vested in a board of directors, usually elected annually by the stock-

holders. These directors commonly exercise absolute power, only such questions as a proposed increase in capital being submitted to a direct vote of the stockholders, and sometimes they do not even decide that. The board of directors is, in turn, controlled by an executive committee, and this committee is not infrequently controlled by one capitalist whose interest in the corporation is larger than that of the other stockholders. The annual meetings are usually attended only by a few holders of stocks. Elections are decided by proxies held in the name of one or two of the managing directors. The average stockholder carries his stock merely for the dividends, and leaves the burden of management entirely to the directors. The largest stockholder, as has been said, controls the corporation, even though his individual interest may be less than an actual majority of the stock. There have been cases, indeed, when a company has been controlled by a man whose individual interest was comparatively small. Events have shown, however, that absolute ownership of a majority of the shares may be essential to security of control, though the majority of the big corporations are not controlled in that way by the banking and moneyed interests.[4] A director of a great corpora-

[4] There has been more than one instance of the managers of a corporation, apparently in secure control, waking up suddenly to find that the majority of the stock has been bought by some other, and perhaps rival, interest. How to safeguard their control has therefore become a problem with directors. Ten years ago, claiming that "the day of proxy control is passed," some of the managers of great railroad and industrial corporations schemed to make their control absolute and safe without being compelled to lock up their money in an actual ownership of a majority of the stock. They wanted to control the property and still be able to employ their capital in other enterprises or speculations. In the reorganization of the Chicago, Rock Island & Pacific Railroad, a device of this kind was introduced. The control of the road was given to the preferred stock, which elects a majority of the directors. Capitalists owning one-half of the preferred stock, or $27,000,000, could therefore control a company whose aggregate common and preferred stock amounted to $150,000,000. This plan is contrary to the American

tion whose securities are listed on the Stock Exchange is an influential individual, with sources of information denied to others. He is, if he uses his opportunities, the true "insider" of the stock market.

Stock Certificates.—Certificates of stock are engraved pieces of paper, signed usually by the president and the treasurer of the company, specifying that the holder whose name is written on the certificate is the owner of a certain number of shares. It is specified that the shares are transferable only on the books of the corporation in person or by attorney upon surrender of the certificate. On the back of the certificate is printed a blank providing for the transfer of the stock upon sale, the new owner being constituted an attorney for the purpose of transfer. In Wall Street, certificates of stock are usually made out for 100 shares, the bulk of the transactions in the Stock Exchange being in 100 share lots. A man may own 10,000 shares, but he will have them divided into 100 certificates of 100 shares each for convenience. Odd share lots, as, for instance, certificates representing 23 shares, are at a manifest disadvantage in speculation, but of vast importance to investment in the aggregate.

Engraving of Securities.—The rules of the Stock Exchange require that certificates of stock, as well as every bond, must be printed from steel plates engraved in the best manner which will afford the amplest security against counterfeiting. There must be two steel plates, namely, a face-plate containing the vignettes and lettering of the descriptive or promissory portion of the document, which should be printed in black or black mixed with a color; and a tin plate from which should be made a printing in an antiphotographic color, so arranged as to underline important portions of the face printing. The two printings

principle of government by the majority. Issuance of common "B" stock without voting power is a similar device of doubtful advisability.

must be so made upon the paper that the combined effect of the whole, if photographed, would be a confused mass of lines and forms, so as to give security against counterfeiting by scientific or other processes. The Exchange requires a distinctive plate for 100 share certificates, so that they may be readily distinguished from certificates representing other amounts of stock. The Exchange also requires that the engraving shall be done by some concern approved by the governing committee. It has therefore been charged with fostering a monopoly, but the Exchange holds that its requirement is necessary for the protection of investors.

Different Kinds of Stock.—It has already been indicated that there are two kinds of stock, preferred and common. In England there are also founder shares, vendor shares, deferred shares, and debenture shares, but these are practically unknown in this country. Preferred stock has a fixed rate of dividend attached to it, which must be paid before the common stockholders can receive anything. Such dividends may be cumulative or noncumulative. If cumulative, any dividend not paid this year must be paid out of the profits of any future year. The dividends accumulate until paid. Preferred stock differs from a bond in that it is not secured by a mortgage on the property, while the holder, in the United States, generally has a voice and vote in the management. The preferred stockholder is thus not a creditor, but a preferred partner in the concern. The common stock is entitled to all the earnings after the interest on the bonds and the dividends on the preferred stocks have been paid. Its rate of dividend thus depends on the profits of the company. The common stock is therefore the speculative commodity of the Street. Preferred stock is as a rule bought for investment, and common stock for speculation. Many companies have only common stock, and common stock may

become so steadily a dividend payer, and thus so valuable, that it enters into the class of investment securities and is no longer speculative.

Bonds.—Bonds represent the funded debt of a company, and are usually secured by some mortgage on its property. They are of various kinds. The first-mortgage bond usually stands highest, in that it has a first lien on the property covered by the mortgage. In some cases, however, prior-lien bonds are issued, and these, as their name indicates, take precedence. Second- and third-mortgage bonds take rank after the first. Consolidated bonds is a name usually given for bonds issued in place of other bonds, the various mortgages being consolidated. This operation is generally the result of a reorganization.

There are various classes of bonds whose names indicate the character of the security pledged for their payment. Thus, equipment bonds are secured by a mortgage on the rolling stock of a railroad. Land-grant bonds are secured by lands owned by the railroad, and are redeemed by the proceeds of the sale of the lands. Collateral bonds are secured by pledges of stocks and bonds of other companies held by the corporation issuing the bonds. Collateral bonds have become very prominent in the Street, especially in the last few years. A railroad buys control of a connecting or rival line, and pays for the same by issuing bonds secured by the securities of the line thus acquired. Income bonds are virtually unsecured, and pay interest only when earned. Debenture bonds are very common in England, and are becoming more so in this country. They are practically unsecured pledges to pay. They are similar in principle to the single-named paper of a merchant, discounted by a bank. Convertible bonds are bonds which can be converted into some other form of security, usually stocks.

Registered bonds are bonds recorded on the books of

the corporation in the names of their holders to whom the interest is sent. Coupon bonds are bonds to which are attached dated certificates representing the interest due on the bond at the regular periods of payment. These may be cut off from the bond and the interest collected through the banks the same as checks. If not paid they may be collected by suit, the same as the principal.

Foreclosure and Reorganization.—In the case of default in interest the bondholders can foreclose the mortgage. The legal forms gone through are generally the same as those in foreclosing the mortgage on a house. There is, however, this practical difference: the house is actually sold to satisfy the debt. In the case of a railroad there is a reorganization—that is to say, a general rearrangement of the capitalization on a basis on which the company can pay at least its expenses and fixed charges. In this reorganization, the first-mortgage bondholders enjoying the highest security get the best terms, while the stockholders, to save their interest from being entirely wiped out, are usually subjected to an assessment; they are compelled to supply most or all of the additional capital. A voting trust often ensues.

The great bulk of the bonds traded in in Wall Street are issued by railroads. Industrial companies, however, have issued them in considerable amounts.

Out of the gross earnings of the company is first paid the cost of its operation. Then must be paid the fixed charges which are the interest on its bonds in the order of their standing. Out of the surplus must be paid, first, the dividends on the preferred stock, if there is any. What remains is applicable to the payment of dividends on the common stock, but the directors may out of this sum use part or all in making betterments or extensions. This payment is usually in such a case charged to operating expenses. Commonly, however, betterments and ex-

tensions are paid for by new issues of stocks and bonds, it being considered legitimate to capitalize improvements. Dividends are sometimes paid when not actually earned. The earnings for this quarter may be less than the usual dividend, yet it may be declared either because the earnings of the preceding quarter were larger, or because there is good reason to believe that the earnings of the succeeding quarter will be more, and it is deemed advisable to maintain the same rate. But where the dividends of a whole year are larger than the earnings applicable to dividends, it is clear that a debt has been created for the purpose, and it is needless to say that an increase in capitalization, or the creating of a floating debt, for the purpose of continuing the payment of dividends and thus sustaining the market price of the stock, is illegitimate finance.

Companies have been organized for every conceivable purpose. Besides the two main Wall Street divisions of railroads and industrials, there are several subdivisions, as, for instance, franchise companies, including street-railways or tractions, telegraph, gas, etc.; manufacturing companies; mining companies; and finance and holding companies. Admitted to dealings in the Stock Exchange are the securities of steam, electric, and cable railroads, coal, iron, copper, express, telegraph, telephone, electric-light and power, gas, mining, chemical, bicycle, cotton-oil, spirits, tobacco, snuff, sugar, paper, match, ice, linseed-oil, pump, rope, envelope, rubber, dry-goods, land improvement, docks, steamships, marble, fuel, locomotives, woolens, fireworks, whiskey, biscuit, lead, salt, zinc, leather, pine, bank-note, flour, corn-products, and ferry companies. In the stock market there are dealings in other kinds of companies, including can, refrigerating, storage battery, lead-reduction, securities, carriage, enameling, elevator, baking-powder, potteries, coke, writing-paper, thread, type, rubber-tire, electric-boat, signal, monotype, bread, stevedor-

ing, realty, car-heating, coupler, typewriter. Enormous capitalization is represented in munitions, petroleum, fisheries, automobile, moving picture, international development, irrigation and engineering construction companies. Speculation companies have for years been engaged in liquidating the assets of embarrassed merchants.

REFERENCES

"Legal Phases of Corporate Financing, Reorganization and Regulation," Coleman, Guthrie, etc., 1917.
"Business Competition and the Law," Gilbert H. Montague, 1917.
"Industrial Combinations and Trusts," Wm. S. Stevens, 1912.
"Trusts and Competition," John F. Crowell, 1915.
Annual Reports of Federal Trade Commission, 1915-1920.
"Trusts, Pools and Combinations," W. Z. Ripley, 1905.
"Voting Trusts" H. A. Cushing, 1915.
"American Corporations," John J. Sullivan, 1910.
"Corporation Finance," Edward S. Mead, 1910.
"Trust Finance," Edward S. Mead.
Report of Railroad Securities Commission, H. R. Doc. No. 256, 1911.
"Modern Business Corporations," W. A. Wood, 1906.
"Rights of the Minority Stockholder," Richard L. Harvey, 1909.
"Corporate Organization and Management," Thomas Covyngton, 1919.
"Financing of Public Service Corporations," Ignatius, 1918.

CHAPTER IX

LISTING OF SECURITIES

To "list" a stock is to have it admitted to the right of being dealt in on the Stock Exchange. No stock or bond can be bought or sold there which has not first been favorably passed upon by the Exchange authorities.

No Guarantee of Value.—The New York Stock Exchange does not guarantee the value of any security which it admits to the privileges of its floor. It neither recommends nor condemns. Each investor must decide for himself the value of the securities which he may seek to buy. The Exchange affords an open and continuous market, but makes no attempt to regulate either its prices, so as to make them conform strictly to intrinsic value, or the management of corporations whose stocks and bonds may be listed on its floor. But the Exchange has certain strict rules governing the admission of securities to its market, and investors may rely upon it that these rules are rigidly enforced. Whether the Exchange goes far enough in its regulations for the listing of securities is a question of some dispute, but as far as it goes, it is scrupulous in enforcement. Of course the Exchange can hardly assume to guarantee investors or to be the censor of corporate action. The expense and labor involved in making an efficient periodical examination in the affairs of all the corporations in the country would render any such duty a practical impossibility. Something must be left to the judgment of the individual. No system can entirely protect a fool from wasting his money. The investor must

make up his own mind as to the value of securities. The mere fact that they are listed upon the Stock Exchange should never be taken as a guaranty of their intrinsic value, nor could any system be devised which would bring about that result.

The Hughes Commission did not recommend that either the State or the Exchange should undertake to verify the statements of fact filed with applications for listing on the ground that any attempt to do so would "give the securities a standing in the eyes of the public which would not in all cases be justified."[1] It did, however, urge that the Exchange should compel the filing of frequent statements of financial condition, and a statement showing exactly for what capital stock has been issued, including commissions paid to promoters and vendors; and that those making the statements be held responsible for the truth thereof.

The position that has been taken by the authorities of the Exchange is that it is not the function of the Exchange to deny or confirm or criticize reports made by corporations, as it might, by such a course, serve to condemn or approve of the value of such securities. The question of value, as has been shown, must be left for each individual investor to decide for himself. While all statements for listing purposes are signed by responsible officers of applying corporations, it has not been found necessary to demand affidavits. An officer who would deliberately put his signature to a false statement could not be depended upon to swear truthfully to it. As to the duty of showing exactly for what the capital stock has been issued including commissions, it has been argued by defenders of the Exchange that the cost of properties which may come together in big combinations can not be procured or estimated by the Exchange. Bankers' and

[1] See under "Listing Requirements," Hughes Commission of 1909.

promoters' commissions and profits are generally paid in securities, and when cash is paid it is a matter of confidential agreement.

Publicity.—Publicity is the best protection which an investor can have, and the greater the publicity, the better it is for Wall Street. This publicity can be best provided for by the government through its laws, but the Exchanges and the corporations themselves can do much to promote it. There are some trade secrets which, of course, a business concern has a right to hold inviolate, but outside of these legitimate secrets, which are as valuable as a patent or a trade-mark, corporate business—and especially as to its finances—should be conducted as much as possible in the open.

Publicity was the first reform advocated by President Roosevelt, in his policy of government control over corporations, and it was not only the first, but the best; and if comprehensively applied would make other reforms almost unnecessary. "The first essential," said President Roosevelt, "in determining how to deal with the great industrial combination is knowledge of the facts—publicity."

The Railroad Securities Commission declared that enforced publicity is immediately needed. It said that stringent provisions regarding publicity of stock and bond issues, which will show how far the laws are obeyed, will be more salutary and more effective than any new statutory demands. The function of the government, it adds, is to see that correct information is available. But even the government is powerless to compel investors to act on this information.

Without passing upon the question whether the New York Stock Exchange has done all that it might do to establish comprehensive publicity in corporate organization, corporate finances, and corporate administration, this at least may be said: It has progressively strengthened its

rules toward that ideal. It certainly has performed a valuable service to the community for many years by its regulations in regard to the listing of securities.

Safeguards Are Numerous.—The Exchange formerly divided its market into two departments, listed and unlisted, but the latter was in 1910 abolished to the great betterment of the Wall Street system. The rules that must be complied with in order to secure admission to the list are worthy of some study, for there is no other branch of Wall Street mechanism in regard to which there is more popular misconception than this. It is important for the investor to know what safeguards the Exchange throws around its market. It will be found that they are numerous.

The constitution of the Exchange provides that there shall be a committee on stock lists to consist of five members, to which shall be referred all applications for placing securities on the list. It is further provided that all securities placed upon the list must be with the consent of the Governing Committee, and only after report made by the Stock List Committee to the Governing Committee, "with a full statement of capital, number of shares, resources, etc." Thus a security to be admitted to the list must pass the scrutiny of two committees, one of them the supreme governing power of the Exchange.

The only exception to this rule is that the Stock List Committee has the power to place on the list, without report to the Governing Committee, any obligations of any national, state or city government, and also temporary receipts issued by any corporation or firm.

Listing Requirements.—The Stock List Committee has, under this constitutional provision, drawn up a definite statement of just what it requires of all applications to list. It is provided in the case of a railroad company that there shall be filed a statement of the location and

description of the property, and, when possible, also a map thereof. This statement should give the title of the company, when it was organized, and by what authority, the route of road, the miles of road completed and in operation, contemplated extensions, equipment, liabilities and assets, earnings, amount and description of mortgage lien or other indebtedness. Also a statement of, and liability for, any leases guaranteed, rentals or car trusts and terms of payment thereof. Also the number of shares of capital stock authorized and its par value, a list of officers and directors, the office of the company, the transfer office and registrar, together with their names.

In the case of bonds only issues upon completed mileage will be listed. The application must state the amount authorized, the date of issue and maturity, the names of trustees, the par value, the rate of interest, whether subject to earlier redemption by sinking-funds or otherwise, and whether convertible into other forms. A copy of the mortgage duly certified is required, and proof that the mortgage has been duly recorded is insisted upon. The application must be accompanied by a balance-sheet and statement of income account of recent date.

In the case of a reorganized company, the Exchange requires a complete financial statement for a period of at least one year prior to reorganization, the receipts and expenditures in detail, a balance-sheet, and a description of the new security issued. This requirement was first made in February, 1895, and materially strengthened the rules for listing. The Exchange recommends that a trust company should be appointed as a trustee of each mortgage or trust deed. When an industrial or manufacturing company applies for the listing of its securities, it must submit the opinion of counsel that it has been legally organized and its securities legally issued. If the company is the result of a consolidation—in other words, a trust—a state-

ment must be submitted of the financial and physical condition of the constituent companies; a full description of the real, personal, and leased property; proof that real estate is free and clear except as to stated liens; a report of responsible expert accountants showing results of business each year for at least two consecutive years, if possible; a balance-sheet; statement of the powers of the directors under the charter; an agreement that the company will not dispose of its stated interest in the constituent companies except on direct authorization of stockholders; and that it will publish at least once in each year a properly detailed statement of its income and expenditures of the preceding year, and also a balance-sheet at the end of its last fiscal year. The Exchange requires all active stocks to be registered, giving the amount, at some satisfactory institution. Failure to maintain a transfer office for a listed security automatically suspends it from the list.

Annual Reports.—Having made these and other requirements, the Stock List Committee for years made the following recommendation, which it now requires of all corporations:

> The Exchange recommends to the various corporations whose securities are here dealt in, that they shall print, publish, and distribute to stockholders, at least fifteen days prior to annual meetings, a full report of their operations during the preceding fiscal year; together with complete and detailed statements of all income and expenditures, and a balance-sheet showing their financial condition at the close of the given period. The Exchange requests that stockholders of the several corporations take such action as may be necessary for the accomplishment of this recommendation.

The following table is a statement[2] of the listings of bonds and stocks by the New York Stock Exchange from 1902 to 1919 inclusive.

[2] Compiled by *Commercial and Financial Chronicle.*

LISTINGS ON NEW YORK STOCK EXCHANGE

	Issues for New Capital, &c.	Old Issues Now Listed	Replacing Old Securities	Total
Bonds	$	$	$	$
1919....	211,074,311	41,795,500	68,132,729	321,002,540
1918....	100,148,400	33,958,500	93,527,800	227,634,700
1917....	1,349,686,350	64,445,000	212,702,200	1,626,853,550
1916....	1,505,530,000	25,925,000	300,751,000	1,829,186,000
1915....	451,854,514	40,539,000	48,798,786	541,192,300
1914....	361,770,667	5,000,000	122,222,333	488,993,000
1913....	447,815,200	25,000,000	175,250,900	648,066,100
1912....	447,676,900	....	207,300,850	654,977,750
1911....	397,563,800	35,122,000	148,148,600	580,834,400
1910....	571,526,800	52,008,300	184,627,400	808,162,500
1909....	712,734,963	8,479,000	377,742,537	1,098,956,500
1908....	648,869,500	95,794,000	128,294,500	872,958,000
1907....	246,733,914	72,362,000	101,717,086	420,813,000
1906....	*x* 303,112,000	12,304,500	256,482,000	*x* 571,898,500
1905....	569,079,000	20,000,000	390,947,650	980,026,650
1904....	429,810,500	....	105,269,100	535,079,600
1903....	191,515,050	12,798,000	376,975,750	581,288,800
1902....	*a* 197,516,313	2,878,000	333,124,987	*a* 533,519,300
Stocks				
1919....	555,645,760	236,060,904	474,927,828	1,266,634,492
1918....	160,688,267	44,652,250	106,684,130	312,024,647
1917....	616,957,245	139,877,552	724,450,548	1,481,285,345
1916....	479,263,618	69,751,875	418,186,265	967,161,758
1915....	319,506,950	96,127,390	523,691,900	939,326,240
1914....	130,383,000	....	441,413,360	571,796,360
1913....	264,714,115	....	347,279,115	611,993,230
1912....	463,935,140	193,956,217	503,139,433	1,161,030,790
1911....	255,897,215	38,000,000	349,717,615	643,614,830
1910....	304,681,590	467,175,700	467,644,255	1,239,501,545
1909....	297,253,037	363,701,600	664,571,448	1,325,526,085
1908....	123,977,900	248,780,200	141,169,350	513,927,450
1907....	159,106,244	321,056,300	95,869,506	576,032,050
1906....	237,479,600	16,440,700	408,849,150	662,769,450
1905....	125,123,300	99,889,200	308,422,400	533,434,900
1904....	120,635,050	....	55,231,750	175,866,800
1903....	172,944,200	38,791,600	215,154,495	426,890,295
1902....	251,069,400	11,462,300	521,500,895	784,032,595

a, not including $1,155,000,000 Imperial Russian State 4% certificates of rente.

x, excludes $425,000,000 Japanese Government bonds.

The total of issues for new capital in these 12 years of 1902-1911 inclusive, averaging about half a billion yearly, amounted to $6,316,629,376.

Exchange Listings and Actual Issues.—Even such figures do not fully disclose the rate at which the actual issue of securities proceeded during the years since 1914, in spite of war time restrictions. Of these years 1916 was unusually fruitful in various kinds of industrial stocks and bonds, especially such as were based on the munitions contracts for European belligerents. Then during 1917 and 1918, after the United States entered the war, another phenomenal spurt occurred in stock exchange operations and industrial issues. Taking the five years of 1915-1919 as a whole, the industrials shared the major part of these increments of securities.

Of the $3,021,171,300 of capital actually issued in 1919, 75 per cent. was estimated as for new capital and 25 per cent. at least for refunding prior issues. Of that aggregate only $432,614,900 were for railroads, compared with $2,588,556,400 or six times as much for industrials. During 1918 the corresponding amount of actual issues of railway and industrial capital of over $100,000 was $2,253,587,300, making for those two years $5,274,558,600. Probably $10,000,000,000 would not be an excessive estimate for the five-year period for actual railway and industrial issues alone,[3] averaging two billion yearly, or four times the amount issued from 1902 to 1911.

REFERENCES

The following sources of information are suggested:

"Regulations and Forms of New York Stock Exchange Relative to Listing."

New York *Commercial and Financial Chronicle* (weekly), early issues in January.

New York *Journal of Commerce* and *Commercial Bulletin* (daily), early dates in each month and year.

The Wall Street Journal, early dates in each month and year.

[3] New York *Journal of Commerce*, January 2, 1919.

CHAPTER X

THE NEW YORK STOCK EXCHANGE

It has been seen that with the progressive issue of new certificates representing ownership or indebtedness, either in the shape of national, state, and city bonds, or in the shape of stocks and bonds of banks, railroads and industrial companies, there has naturally developed a market for the buying and selling of these securities. Wherever this stock market becomes of large extent it is necessary to establish a stock exchange for its proper regulation. Stock exchanges now exist in every large city of Europe and America.

There is at least a score of widely recognized stock exchanges in the United States. There are three in Canada, and several in the prominent centers of Latin America. These, with the older exchanges of Europe, and the more recently organized ones of Asia, Africa and Australasia, easily total a hundred, comprising the world's more notable stock exchanges.

Objects.—The New York Stock Exchange is an unincorporated association of 1,100 members, organized for the purpose of supplying a continuous and regulated market for the buying and selling of stocks and bonds. "Its objects," says the new constitution adopted in March, 1902, "shall be to furnish exchange rooms and other facilities for the convenient transaction of their business by its members as brokers; to maintain high standards of commercial honor and integrity among its members; and to promote

and inculcate just and equitable principles of trade and business."

The management of the Exchange has tried to carry these objects into effect. Whatever may be justly said of the stock market, no serious criticism of the good faith of the Exchange can be made. Its sins are those of omission rather than commission. It may at times move too slowly in making changes, but it moves. It insists upon honorable dealings between its members and between its members and their customers. A member guilty of fraud is expelled. A member unable to fulfill his contracts is suspended. The Exchange enforces strictly its elaborate laws for the listing of securities and for the sale and delivery of stocks.

Its Proper Jurisdiction.—Those who hold that it should do much more than it does should remember that there is a limit to its powers and responsibilities. John R. Dos Passos, who is an acknowledged authority on the law of Wall Street, holds that it seems entirely reasonable "to confine and limit the jurisdiction of the Stock Exchange to those matters which arise between its members in the course of their business with each other as brokers; otherwise its judicial powers might be extended to embrace every affair of human life, which was never intended, and which the law would not permit."

Membership.—In 1869, after the consolidation of the Stock Exchange, the Open Board of Brokers, and the Government Bond Department, the membership of the united body was 1,060, but ten years later, 40 additional memberships were created and sold to defray the cost of an enlargement of the Board-Room. Since then there has been no increase in membership, and the constitution provides that there shall be no increase except by the action of the Governing Committee subject to approval by a majority of the members.

While located in New York, the Exchange is actually a national institution. There are stock exchanges in other cities, but these are local institutions, and their markets restricted for the most part to dealings in local stocks. But the New York Stock Exchange deals in the securities of the entire nation, and its membership represents many different parts of the country. There were, in 1911, 104 out-of-town members, including 32 of Philadelphia, 17 of Chicago, and 20 of Boston. St. Louis, Baltimore, Buffalo, Rochester, Kansas City, Richmond, Washington, San Francisco, Pittsburgh, Minneapolis, Cincinnati, New Orleans, and other cities are represented in the membership.

Many of the members maintain branch offices. These number 505, most of them being in New York City itself, but a great number scattered among 50 different cities and towns in the United States and Canada, as well as in London, Paris, Berlin and Hamburg. There are branch houses on the West Coast and as far north as Toronto. Some firms maintain as many as a score of out-of-town branch offices.

The 1,100 members of the Exchange represent several hundred firms, with probably 3,000 partners. Usually a firm is content to have only one partner in the Exchange, but there are many which have two or three and there is one firm of ten partners, eight of whom are members of the Board.

It does not follow that because there are 1,100 members they are all brokers. As a matter of fact, only a part of them are. Among the members are such great capitalists as John D. Rockefeller, William Rockefeller, George J. Gould, Edwin Gould, Frank J. Gould, Howard Gould, August Belmont and Edwin Hawley,[1] men who never execute an order on the floor, and who rarely, if ever, are seen there. These men employ brokers. They are prin-

[1] Deceased.

cipals. Membership in the Exchange gives them the advantage of a lower rate of commission than they could command as outsiders.

Their memberships represent to each of them in interest on market price of seats and annual dues an expenditure of $3,250 a year more or less as the price of seats advances or declines; but they are able to save more than that in commissions. There are others who were formerly active brokers, but who now have joined the class of principals. There are other members, heads of large banking or commission houses, who are seldom seen on the floor, but intrust the interests of their firms there to junior partners. Moreover, many of the most prominent men in the Street are not members of the Exchange. J. Pierpont Morgan was not a member, but his son of the same name is. Although James R. Keene was for years one of the noted stock operators in the Street, he was not a member.

Two-Dollar Brokers.—It is estimated that the members and their employees form an army of at least 15,000 workers. There are many members who maintain no offices of their own but clear their business through others. Then there are other members who serve as brokers for brokers. They constitute the large class, estimated to number 250, of what are called "two-dollar brokers"—that is to say, they execute orders for other brokers at the low but legal rate of $2 per 100 shares. The same business would cost an outsider $12.50. They are specialists usually in a given group of stocks or bonds or both, on which they are thoroughly posted.

Room Traders.—There is another class of members who are known as "Room Traders." These do not execute orders for others, but buy and sell for their own account alone. Most brokers speculate for their own account to some extent, although many make it a rule to confine themselves to a strict commission business. But

Room Traders are professional speculators, who act at the same time as principals and agents—that is to say, they execute their own orders. There are between 50 and 100 of these Room Traders who enjoy the privilege of being all the time on the floor of the Board-Room, and thus able to take advantage at once of every opening. They know the prices even before they are recorded on the tape, and they are able to join in every upward movement the moment it begins, and to abandon it the moment it shows signs of wavering. They are in and out of the market perhaps a dozen times a day. They constitute an important element in it.

Specialists.—There is still another class of members. They are "Specialists"—that is, brokers who make a specialty of one or two or three securities alone, these securities being usually of the investment class, requiring close and expert attention. The business of these specialists is also largely with other brokers. It will thus be seen that the number of brokers who act directly as agents for outside traders forms less than one-half of the Stock Exchange membership. The average attendance on the floor of the Exchange is between 400 and 600, but on active days it runs up to from 1,800 to 2,000.

Membership in the Exchange being limited to 1,100, admission is obtainable only when there is a vacancy. Membership is secured through purchase of the "seat" of a deceased or insolvent member, or of some one who desires to retire from business. The application is passed upon by a Committee on Admissions composed of 15 members. This committee has full power of election, but there must be 10 affirmative votes. The applicant must be of legal age and a citizen. He must pay an initiation fee of $1,000 in addition to the cost of his seat. No certificate or other evidence of membership is issued.

"Seats"—The word "seat" as applied to a member-

ship is an inheritance of the old days when the brokers had individual seats in the Board-Room, like Senators in a Senate chamber. There are no such seats now in the Board-Room, and very few chairs of any kind. The brokers are too busy to sit down. Every member has the right to transfer his membership subject to the approval of the Committee on Memberships. With that approval he may sell it. If he dies, the committee sells it and pays the proceeds to his heirs after payment of any outstanding claims of the Exchange or of the members thereof. If he fails, the seat is sold for the benefit of his creditors, but members of the Exchange having claims upon him have a first lien upon it.

Membership in the Exchange is an asset of large value. The price of seats varies, like the price of stocks, although not so volatile. The price is, however, a fair indication of the activity of the stock market in any given year. There are a few old members, who joined as far back as the sixties, who paid only $500 for their seats. In 1871 seats were sold as low as $2,750. In the boom year of 1882 the price reached $32,500. Two years later, in the panic, the price fell to $20,000. The next year, however, it reached $34,000, and this remained the highest price for many years. In the panic of 1893 memberships were quoted at $15,250, and in 1896 as low as $14,000. Thereafter there was a rapid advance, until in the last week of 1901 sales were made at $80,000. At this price the total value of Stock Exchange seats amounted to $88,000,000. In 1902 the price fell to $60,000, and later advanced to $70,000. In 1909 seats sold as high as $96,000, and in January, 1920, to a new high of $115,000. In 1913 they sold down to $37,000. To the price of the seat must be added the initiation fee. The number of membership transfers varies from 40 to 100 a year. One reason for the advance in price in the last few years, apart from the

great growth in business, is the demand from out-of-town brokers seeking entrance in the Exchange, and the demand from rich men in behalf of their sons, whom they wish to set up in a genteel business.

Something more than wealth, however, is required in the applicant. He must be of good business reputation, and must have no alliances that would bring discredit on the Exchange. To a member who formed a partnership with a man guilty of dishonorable practices on Black Friday was given several years ago the alternative of giving up the partnership or his seat in the Exchange. He gave up the partnership. A member who fails must immediately inform the president, and is suspended until such time as he is able to make a satisfactory settlement with his creditors.

Then to secure reinstatement he must be balloted for under the same conditions as apply to a new applicant, except that if six successive ballots are unfavorable to him he has the right of appeal to the Governing Committee. The insolvent member, however, must settle with his creditors within one year, or his seat will be sold, though the Governing Committee may extend the time. If the applicant for membership or for reinstatement in order to secure favorable action makes a misstatement upon a material point, he will be subject to expulsion. If his failure has been caused by reckless or unbusinesslike trading, he may be declared ineligible for reinstatement.

Expulsions.—A two-thirds vote is required to expel a member found guilty of fraud. Prior to 1865 the Exchange expelled three members for fraud—one for deceiving a customer as to the price of a stock, another for forgery, and a third for issuing a worthless check. From 1874 to 1902 there were nine expulsions—three in 1896 for "bucket-shopping" the orders of customers. An equal number—nine—was expelled in the five and a half years

to June 25, 1920. The most famous of the expulsions was that of Hutchison, John R. Duff's broker in the Hannibal and St. Joseph corner. Hutchison appealed to the courts, which decided that the Exchange had the right to expel him, but could not appropriate the value of his membership. Up to that time the laws of the Exchange provided that the seat of an expelled member escheated to the Exchange.

Any member directly or by partner connected with any organization in New York city dealing in securities similar to those listed in the Exchange is liable to expulsion. The Governing Committee is very strict in enforcing this law. It has by resolution prohibited any connection, direct or indirect, between its members with the Consolidated Stock Exchange, as being detrimental to the interests of the New York Stock Exchange. Every member in New York is required to have a place of business where notices may be received. No member can represent more than one firm. Branch offices must be in charge either of resident partners or of salaried employees.

Commissions.—The Exchange maintains its rates of commissions rigidly. The commissions are always based on the par value of the securities traded in. No rebates or discounts of any kind are allowed. The constitution provides that on business for parties not members of the Exchange, including joint account transactions in which a non-member is interested, transactions for partners not members of the Exchange, and for firms of which the Exchange member or members are special partners only, the commission shall be not less than 1/8 of 1 per cent. This, as has been stated, amounts to $12.50 on 100 shares, but as every purchase except for permanent investment is followed by a sale, the commission on one transaction both ways amounts to $25. On every purchase and sale, therefore, there must be an advance of at least 1/4 of 1

per cent. to pay the commission.[2] To the public the range of 7½ to 20 cents a share covers the charge on the selling-price basis and applies to stocks as well as bonds.

Business is done by members for members who give up the name of a principal at 25 to 30 cents for bonds and 1¼ to 3 cents for stocks, and for members not giving up a principal at 37½ to 50 cents and 1¾ to 5 cents respectively. Violation of the commission law is punishable by suspension from one to five years, but a second offense means immediate expulsion. A member cannot form a partnership with a suspended member or with any insolvent person.

The Opening.—The Exchange is opened every business day at half-past nine, but no business can be transacted until ten o'clock, when the Chairman, who occupies a seat upon the rostrum, announces the opening. It is the duty of the Chairman to open and close the Exchange, preserve order, and make all announcements, such as deaths, insolvencies, etc. He also buys and sells stock "under the rule"—that is, when a member is unable to make good deliveries, stocks are bought or sold for his account by the Chairman. There are five hours of trading. The Exchange closes promptly at three. Only loans can be made after that hour. A fine of $50 is imposed on a member who makes any transaction in stocks or bonds, listed or quoted in the Exchange, after that hour or before 10 A. M. in the Exchange or publicly outside.

As soon as the sound of the Chairman's gavel is heard at the opening a babel of voices is raised. The opening is usually active, as orders accumulate over night. To the onlooker in the gallery everything is apparently noise and confusion. Here is business, he would say, without any

[2] By resolution of April 13, 1910, rates of commission on mining shares are based upon selling price regardless of par value, and are fixed for non-members at $12.50 per 100 shares when selling at $10 and above per share, or at $6.25 when selling below $10.

system. If he did not know that he was in the Exchange, he might suppose that by accident he had entered a lunatic asylum. He sees men rush wildly into a group with violent gestures and raised voices, push and struggle and shout, all apparently to no purpose. But now and then he will observe some one leave the group and quietly make a memorandum on a pad. In all that babel of voices and mass of struggling men, comparable only to the crush on the Brooklyn Bridge in the rush hours, a sale has been made involving thousands of dollars.

The Stock Exchange was for years one of the show places of New York. Tourists were always taken there, and the galleries were crowded, especially on days of excitement, when the scenes on the floor were of extraordinary interest. In the present Exchange building there is a gallery, but admission is denied except to those specially introduced by members. The authorities of the Exchange do not think it safe, or otherwise desirable, that there should be a crowd of unidentified strangers in the gallery in times of excitement or panic.

Method of Trading.—But while superficially all is confusion worse confounded in the Board-Room, as a matter of fact no system could be more simple or effective, and all trading is done under strict rules rigidly enforced. In every part of the room are posts bearing placards on which are printed the names of stocks. Every active security has its own place for dealings. Thus, there is a Sugar post, a Reading post, and the like. There is a place for borrowing stock, and another for loaning money. There are some posts where several stocks are traded in. Brokers having orders to buy Sugar go to the Sugar post, and cry out how much they want and the price they will pay, much as one would bid for real estate at an auction-room, except that here there is no auctioneer.

Bids and Offers.—One broker bids, say, 116 for Sugar.

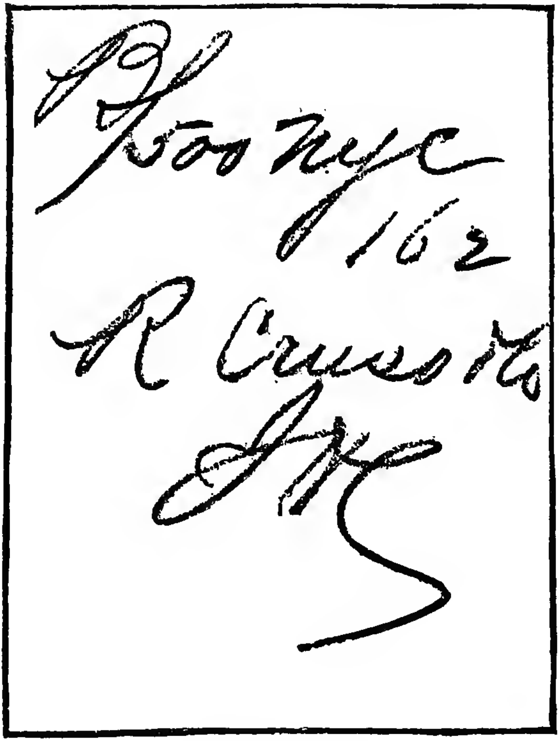
There is another broker who has an order to sell at 116¼, or there may be a dozen offers or a dozen bids at the same time. The first bid or offer, however, when it can be distinguished, takes the precedence. If there are more offers than bids the market is weak and the price declines. If the demand is greater than the supply, the price goes up. Prices are made by eighths of 1 per cent.; the fractions used are ⅛, ¼, ½, etc.; there are no thirds or sevenths. No seller offers a stock down at more than ⅛ of a point at a time. For instance, if his offer of 100 brings no buyer, his next offer is always 99⅞. Each post has an indicator giving the last quotation made. It is necessary that the broker should be active, strong of physique and of voice, quick to see, and prompt to act. No other occupation requires more alertness of mind, coupled with more strength of body and tension of nerve, than that of the broker of the Stock Exchange. All business is done by word of mouth. There are no written contracts. A mere word "sold" or "taken" closes a transaction that may involve $10,000, or even $1,000,000. As he buys or sells, the broker records on a little pad, at the earliest opportunity, the name of the broker of whom he has bought or to whom he has sold.

The Pads.—These pads are supplied to the members of the Exchange and are of uniform size. The cut on page 145 shows the size of one of these pads, and it is of interest as showing in how small a space a large transaction may be recorded.

In this case, the broker has bought 500 shares of New York Central at 162, the total involved being $81,000. He simply recorded the name of the seller, the amount, the price, and his own initials. Later, as will be explained, there are comparisons made between buyers and sellers.

Here, then, is a market, or combination of markets, in which, strictly speaking, there is no actual exchange of

securities. That comes later. No stock or bond is ever transferred in the Board-Room. All that takes place there is an oral contract to sell or buy, to deliver or receive, a certain number of stocks or bonds at a certain time outside



THE BROKER'S PAD

of the Exchange. These oral contracts to deliver are generally called "sales," but sometimes "transactions."

Privileges of the Floor.—No one is allowed on the floor except members and uniformed employees of the Exchange. When a member is wanted at the door or at

the railing which surrounds the Board-Room, his name is given to an employee, who, by means of an electric annunciator, uncovers a number which is assigned to each member. This number is painted on a rectangle of opaque glass about 9 by 12 inches in size. Behind the glass are electric lights of different colors. If a member is wanted at the telephone, a light of one color is shown, or if he is wanted at the entrance, a light of another color will flash.

Most of the orders are conveyed to the floor by telephones, of which there are several hundred around the Board-Room. These telephones are leased by the individual members, and connect with their offices. Millions of dollars' worth of property are bought or sold every day through the agency of these telephones.

The Active Broker.—Between the telephone, the annunciator, and the execution of his orders in the various groups, the active broker, in his few hours on the Exchange, works harder than most people do in twice the time. He is under a severe nervous strain. He labors in an atmosphere of excitement, suppressed for the most part, but at times belching forth in volcanic fury. Besides executing his orders, he is supposed to keep a watch on what is going on in all parts of the room, and to report to his office all rumors that are circulated and all evidences he discovers of manipulation and other influences at work. He must know what other brokers or traders are selling or buying, and whom they are supposed to represent. He must form a quick judgment as to the forces which are at work in the market and as to the probable rise or fall of prices.

No wonder the active Board member is usually a young man. The elder members of the firm remain in the office directing its affairs and advising customers. The juniors have to enter the arena of speculation to grapple with the gladiators of the Board-Room. In a time of spe-

cial excitement this is no mere figure of speech, because the broker is obliged to use physical force to push himself into the group of buyers and sellers, and to hold his own and to make himself heard against all comers.

Few Disputes.—The constitution of the Exchange provides that all offers made and accepted shall be binding, and it is creditable to the members that the large transactions, made as they are orally, are honorably fulfilled, and comparatively few disputes arise as to the terms of any contract. In all offers to buy or sell, the offer must be accompanied with some specific number of shares, and when no amount is named it is considered, under the constitution to be for 100 shares of stock of the par value of $100 each, or for $10,000 of bonds. As a matter of fact, the bulk of the transactions is in $10,000 blocks.

Cash and Regular.—It is specified that bids and offers may be made only as follows: "Cash," that is, for delivery and payment upon the day of sale; "regular," which is for delivery upon the business day following the day of sale; "at three days," that is, for delivery upon the third day following the making of the contract; "buyer's or seller's options" for not less than four days nor more than sixty days.

Options.—These options mean that the buyer has the right to demand the delivery, or the seller has the right to deliver, at any time within the period of the option. This is a device which, in a measure, corresponds to the system of options or "futures" in grain and cotton speculations, in which the products are sold to be delivered in some future month. The chief difference is that grain and cotton options are for months, not days, and one may buy grain or cotton in March to be delivered, it may be, the following December.

In the Stock Exchange on transactions for more than three days written contracts are exchanged on the day

following the transaction, and carry interest at the legal rate. On such contracts one day's notice must be given, at or before 2.15 P. M., before the securities shall be deliverable prior to the maturity of the contract. Bids and offers of cash, regular, at three days, and buyer's or seller's options may be made simultaneously, as being essentially different propositions. In offers to buy on seller's option or to sell on buyer's option the longest option has precedence. In offers to buy on buyer's option or sell on seller's option the shortest option has precedence. No other bids or offers have any standing on the floor. No sale is permitted on which a deposit shall be offered as to limit of liability. Brokers carry stocks for their customers on margins, but between themselves all transactions are on the basis of full payment on delivery.[3]

"Wash Sales" Prohibited.—No fictitious transactions are permitted on the floor under penalty of suspension for not more than one year. The common Street name for fictitious sales is "wash sales." When two brokers conspire together to make a pretended sale of a stock in order to give it a fictitious quotation, that is "a wash sale." It is practicable, however, for an outside operator, by using different brokers, some to sell and others to buy, by a process of "matched orders," as they are called, to give a fictitious value to a stock. This is, indeed, a common manipulative device, and has at times been carried to such extremes as to constitute very plain cases of fraud. While the brokers may be innocent tools of such a conspiracy, it has been argued that the Exchange might by some extension of its rules be able to reach the real conspirators, and in some way to prevent the evil. The Ex-

[3] New rules covering this and other phases were adopted in keeping with the State legislation of 1913, and subsequently, especially in 1914, 1915, 1916.

change aims at making every sale represent a genuine transaction.

The constitution provides that no offers to buy or sell privileges to receive or deliver securities shall be made publicly at the Exchange under a penalty of $25 for each offense. By "privileges" are meant "puts," "calls," and "spreads," Wall Street terms for a system of bets on the future prices of stocks, and betting is not permitted on the Exchange. Privileges, however, may be dealt in outside the Board-Room, in which case members dealing in them for non-members must charge the regular commission of 1/8 of 1 per cent.

Comparisons.—When the broker has bought or sold in the Exchange, he reports the transaction by telephone to his office, and not later than an hour after the close of the Exchange the seller is obliged to compare, or endeavor to compare, the transaction at the office of the buyer. Formerly comparisons were made verbally, but in 1891, a new system was introduced, and now slips or tickets are exchanged. No comparison or failure to compare, and no notification or acceptance of notification, shall have the effect of creating or cancelling a contract or changing its terms. If the stocks are to be cleared, the transaction passes through a system described in another chapter.

Deliveries.—Deliveries of securities must be made before 2.15 P. M. on the same day, if sold for cash, or on the following day, if sold regular. The vast majority of sales are regular. If there is no delivery before 2.15 the contract may be closed out "under the rule." In this case immediate notice must be sent to the Chairman, who will read it from the rostrum, and will publicly buy in the stock at the best price that can be obtained. If this price is more than that at which the stock should have been delivered, the buyer has a claim against the seller for the difference. The same rule applies to borrowed and loaned

securities. If no notice of failure to deliver is given, the contract continues without interest until the next day. When the transfer-books of any company are closed by a legal impediment, deliveries of stocks on contract are made by irrevocable power of attorney, the papers to be satisfactory to the recipient or passed upon by the Committee on Securities.

Assignments.—Definite rules have been established by the Exchange to govern the form of assignment and powers of attorney which must be acknowledged before a notary public. Every stock certificate carries on its face the name of the person to whom it is issued and the number of shares he owns. If the holder sells the stock, it is transferred on the books of the company from the name of the former owner to that of the new, and a new certificate is issued to the latter, but it can also be transferred by an assignment on the back of the certificate. Ultimately the buyer will have the stock transferred to his own name, but in the meantime he has complete evidence of his ownership. It is prescribed by the rules of the Exchange that the signature to the assignment must be technically correct—that is, it must correspond in every respect with the name as written on the face of the certificate. Even such prefixes and affixes as Judge, Doctor, Rev., or M. D. or LL.D. must appear in the indorsement. Certificates in the name of a married woman are not a good delivery while the transfer-books are open; when the books are closed a joint execution of the assignment by both the husband and wife before a notary public is required. An indorsement by a firm represented in the Exchange on a certificate is considered a guarantee of the correctness of the signature of the person in whose name the stock stands. In the delivery of stock, the receiver has the option of receiving by certificate and powers of attorney irrevocable in the name of and guaranteed by a

member of or firm represented in the Exchange, or by transfer thereof; but in all cases where personal liability attaches to ownership, the seller has the right to deliver by actual transfer on the books of the company. The receiver may, in all cases, require delivery by transfer when there is time to make it and the books are open. Certificates in the name of an institution or in the name of one of its officers with title affixed are not a good delivery unless assignment is acknowledged before a notary. Some companies—as, for instance, the Western Union Telegraph and the American Sugar Refineries—require, in addition, a certified copy of the resolutions of the directors of the company in whose name the stock stands.

Dividends.—Deliveries should be made in lots of 100 shares or multiples thereof, and in the case of bonds in lots of $10,000 or multiples thereof. Dividends on stocks are paid, of course, only to the person to whom certificates have been issued and whose name appears on the books. As soon as the books are closed all transactions in the stocks are "ex-dividend." The buyer does not receive the dividend, as his name cannot be entered on the books after they have been closed. The constitution of the Exchange provides that the buyer is entitled to receive all interests, dividends, rights and privileges, except voting power, which may pertain to the securities contracted for, and for which the transfer-books shall be closed during the pendency of the contract, and the seller is obliged to deliver to him a due bill therefor signed or indorsed by him. But when a stock is sold, ex-dividend, it is sold with the dividend off. The ex-dividend quotation of a stock is generally the last previous price less the amount of the dividend. For instance, if the price had been 130, and the books closed for a dividend of 1½, the next quotation would be 128½. The constitution prohibits, under penalty for violation, all offers to buy or sell dividends publicly at the Exchange.

This, however, is done frequently in Wall Street. It is in the nature of a bet on the amount of the coming dividend. For instance, there may be much discussion whether the American Sugar Refineries Company's next quarterly dividend will be 1¾ per cent. or 2 per cent. A bull on the stock believes that the dividend will be increased, so he offers 1⅞ for the next dividend. If the company declares 2 per cent., he makes the difference of ⅛ per cent.; but if the old rate is declared, he loses what he has paid in excess of the amount declared.

Short Sales.—As has been said, there is a place in the Exchange where stocks may be loaned and borrowed. The outsider is often puzzled by this class of transactions. Why, he may ask, does any one desire to borrow stocks? He borrows in order to make deliveries. He is under contract to deliver, say, 100 shares of Rock Island. He does not own the stock and so he borrows it. But why should he sell something that he does not own? This question opens up the phenomena of "short" sales. It has already been explained that a bear is short when he has sold stock that he does not own, but hopes to be able to buy on a declining market. He believes, to put a suppositional case, that the stock of the "Trans-Continental" Company is selling too high. It is paying 5 per cent a year, but is quoted at 172 on reports that there will be an increase to 6 per cent. The bear has information, or thinks he has information, that the directors will maintain the old rate, so he begins to sell the stock. But as he does not own a share, and as deliveries must be made the day following the sale, his broker borrows the stock for him. There are usually many lenders, for it is cheaper to lend the stock than to carry it as collateral for a loan at a bank. The lender of a stock receives its full market value in cash. His advantage is that he can thus receive a larger sum on the stock at a lower rate of interest than

he could by borrowing money on it at the bank, and at the same time he has the right to demand return of the stock on repayment of the sum given for it. Loans of stock thus appear on their face the same as sales, and are subject to the same rules of delivery and clearance. The bear who is short thus makes delivery of the stock that he has sold with stock that he has borrowed. Taking up again the thread of the suppositional case, let it be understood that the bear's information is correct. The old rate of dividend is declared and the price of the stock declines to 165. Then the operator orders the broker to buy the stock in for him. This is accomplished, the loan is then satisfied by the delivery to the lender of the stock bought, and the operator has made $7 a share, less commissions and interest.

As a rule, only professional or semi-professional speculators operate on the short side. Outsiders almost always trade on the long side. Indeed, the majority of people are by temperament bulls. Wall Street is distinguished from most other markets for the facilities it affords for selling what one does not possess. Short selling has been subject to much criticism in that its effect is to depreciate the market value of property. It is described as an assault on values. If A owns 200 shares of stocks valued at $20,000, and B offers to sell the same at $19,000, he has depreciated the value of A's property by $1,000. It may be said that the intrinsic value is unchanged. But if A seeks to borrow money on his stock, the bank will assess its value as collateral on the basis of the price at which B offers to sell, and not on what A considers it to be worth. Nevertheless, it must be confessed that it is difficult to distinguish any real difference in the nature of transactions on the long and the short side. If it is right to speculate for a rise, it is right to speculate for a fall. The bear has his place in the market. He sometimes per-

forms a useful office in restoring prices to their proper level. Like the minority in Congress, which serves as a check on the majority, the bear constitutes a check on undue inflation of prices. The subject of short selling is treated at greater length in other chapters.

In the rules of the Exchange loans of stocks, which are a part of the machinery of short selling, are treated as regular sales. It is provided that notice for the return of securities must be given at or before one o'clock.

The Exchange maintains a Bond Department, with places on the main floor for bond dealings, and the transactions not infrequently exceed $5,000,000 a day, and have reached much greater sums. But the outside sales of bonds, "over the counter," as the Street phrase is, are larger, and call for the services of a distinct class of brokers expert in investment securities.

Insolvencies.—The business of a stock-broker is profitable, but extra-hazardous. One day of panic like that of May 9, 1901, or July 30, 1914, may wipe out years of profitable business. Indeed, on the first of these days it is believed that a majority of the brokerage houses were practically insolvent, and but for the speedy relief and rally many would have gone under. Nevertheless, from 1870 to 1902 there were only 631 Stock Exchange failures, an average of 20 a year. Fewer failures were due to greater stability of business. In the panic of 1907 there were few Stock Exchange failures as compared with the record of the panic of 1873, when there were 79. In 1893 there were 13 insolvencies. The closing of the Exchange for four and a half months in the war panic of 1914 no doubt prevented many insolvencies, of which there were 14 between January 1, 1915, and March 10, 1919.

The Exchange has a Committee on Insolvencies, consisting of three members of the Committee on Admissions, whose duty it is to investigate every case of insolvency

immediately after its announcement; and should it ascertain that the failure is caused by reckless or unbusinesslike dealings, it reports the same to the Committee on Admissions, and the member may be declared ineligible for reinstatement, even if he should settle with his creditors. There have been a number of cases in which reinstatement has been refused for this reason. A member in applying for reinstatement is obliged to give a list of his creditors, a statement of the amounts of the original liabilities, and the nature of settlement in each case. When a member fails, his outstanding contracts are fulfilled by buying in or selling out under the rule of the Exchange.

Holidays.—The Exchange is closed on Sundays and all holidays, and it often voluntarily closes its doors on Good Friday and on such special occasions as the funeral of the President of the United States or the celebration of a national event. Business on Saturdays ends at noon. All contracts due on Sundays and other holidays are settled on the preceding day. On Saturday all contracts in the regular way, and loans of stocks and money made Friday, are settled on Monday, and other contracts and loans of stocks and money falling due on Saturday are settled the day previous.

Governing Committee.—The government of the Exchange is vested in the Governing Committee, consisting of a President and Treasurer, elected annually, and of 40 members chosen for terms of four years. They are divided in classes, so that 10 are elected every year. This committee has supreme authority. Its decision on all matters is final. Before the consolidation in 1869, every matter of business was put to a vote of the members of the Exchange, but the present system has worked far better. It is substantially the same as that of the directors of a corporation. The governors are divided into a number of subcommittees, which have supervision over the different

parts of the machinery of the Exchange. There are committees on arrangements, admissions, arbitration, commissions, constitution, finance, law, securities, stock list, and the Clearing-House. Governors are paid a small directors' fee for every meeting they attend, but the service they perform is really one of love. Men who could command high salaries as officers of corporations practically give their abilities and a large share of their time to the proper administration of the affairs of the institution. The Arbitration Committee settles without resort to litigation differences between members, and also between members and non-members when the latter will agree to abide by the result.

To be President of the Exchange is considered a high distinction. Since 1817 nearly fifty men have held the office, among the more noted being John Ward, H. G. Stebbins, Charles R. Marvin, W. R. Vermilye, William Alexander Smith, Edward King, Brayton Ives, Donald Mackay, J. Edward Simmons, Francis L. Eames, Rudolph Keppler, and Ransom H. Thomas, who holds the record for length of service. There have been only seven secretaries in eighty-five years. The Exchange has also a Chairman whose duties have been explained. This official receives a salary; he is a member of the Exchange, but not of the Governing Committee.

The Exchange Building.—The new building of the Stock Exchange stands in Broad, New, and Wall Streets. Its ground plan is L-shaped, with its classic front on Broad and its enlarged Board-Room and new office structure occupying half a block on both Wall and New Streets, respectively. The building, constructed of a high grade of Georgia marble, and distinguished by rows of fine Corinthian columns, is admirable in exterior architecture and interior conveniences. The Board-Room is a superb apartment, 138 feet long by 112 feet wide, and has a

height of 80 feet. It extends from Broad Street to New, and contains many novelties for lighting, heating, ventilation, and the transaction of business. It is claimed for it that this is the most complete Stock Exchange in the world, a veritable palace of investment and speculation.

In the basement are built great steel vaults containing hundreds of safe deposit boxes or safes for the security of stocks and bonds held by the members. It is one of the picturesque sights of Broad and Wall Streets after 3 o'clock to see the brokers carrying their securities to the vaults. First will come two clerks carrying a box containing the valuable papers. Then follows closely a member of the firm who keeps an eye on the box and deposits it in his safe. Millions upon millions of dollars' worth of securities are thus carried through the streets of the financial district every business day.

Comparison with London System.—It is but natural to inquire how the mechanism of the New York Stock Exchange compares with that of the London Exchange. There is really no comparison; there is a contrast.[4] In everything except international scope of operations, the New York Exchange has the advantage. To Americans the London system seems antiquated and clumsy, but Mr. F. W. Hirst tells us that the London division of functions into jobbers and brokers makes for a free market and close prices, and he claims that there is no other place in the world where good stocks are more easily and quickly realized at a minimum of loss, or purchasable so near the market price, as on the London Stock Exchange.

[4] As the eagerness and passion of New York leave European stock-markets far behind, for what the Paris and London Exchanges are at rare moments, Wall Street is for weeks, or perhaps, with a few intermissions, for months together, so the operations of Wall Street are vaster, more boldly conceived, executed with a steadier precision than those of European speculators.

JAMES BRYCE in "American Commonwealth."

In London, there are clearances, but they are made every two weeks, not daily as in New York. Stocks are admitted to dealings, but under different scrutiny and regulations than prevail in New York. Then, in London, there is a dual system of jobbers and brokers, that seems incomprehensible to Americans accustomed to direct dealings between principals and agents. As in the administration of English law courts, there are distinct classes of counselors and attorneys, so in the London Stock Exchange there are brokers who represent customers, but who must do all their trading through jobbers, who have no dealings with the public, but trade among themselves and with brokers. The jobbers are the wholesalers, and the brokers the retailers. In New York, a customer may give his order in a broker's office and have it executed in the Exchange possibly in two or three minutes, and the record of it reported on the tape a minute later; but business in London goes through a system of circumlocution and delay quite characteristic of English conservatism and antagonism to haste. No record of sales is made, and while there are stock "tickers," there was much opposition to their introduction, and even now they record only prices, and not sales.

The London Exchange has something over 5,000 members, besides a great number of clerks. The latter serve four years of apprenticeship, when they may become members on payment of an entrance fee of 250 guineas. Others than clerks may join on a payment of double that amount. Members are reëlected every year. The Exchange is governed by a dual system of administration, very different from that of New York. It is controlled by a stock company commonly called the "House," having £240,000 capital divided into 20,000 shares. Only members can be permanent holders of the stock, and every member must own at least one share. Nine managers, elected by the share-

holders, appoint most of the officers of the Exchange and fix the charges for admission of new members. The new members of the Exchange are represented by a committee of three which administers the rules, adjudicates complaints and maintains the inviolability of contracts.

Arbitrage Restricted.—Until quite recent years there have been opportunities for what are called "arbitrage" dealings between the New York and London stock markets. Instantaneous quotations are exchanged between New York and London, but as there is generally a difference in the prices, an active broker may, through his representative abroad, be able to buy in one market and sell in another at the same time and clear a profit. In an arbitrage transaction the ocean has to be crossed twice by a cablegram passing through the hands of three operators, but this takes only about four minutes and has been done in less time. The difference in time between London and New York is four minutes and one second less than five hours. As the New York Exchange opens at 10 A. M., it is then four minutes of three o'clock in the afternoon in London, and by two minutes after three the full New York opening prices are known in London, only the six minutes being required to make the sales in New York, to gather the quotations, to put them into the hands of the telegraph operator, to transmit them to London and to publish them there.

The hour of closing business in the London Exchange is at three o'clock, but the trading goes on until four and on the curb much later. The London two o'clock quotations are received in Wall Street shortly after 9 A. M. London can trade by cable in American stocks during all the time the New York Exchange is open, as when it closes it is only eight o'clock in London. The London orders executed in New York are often large. They have amounted to as many as 100,000 shares and over in one

day, and they are sometimes an important factor in the market. There was formerly a large arbitrage business between New York and other American cities, but this has been reduced to a small figure by the act, in 1898, of the New York Exchange, which, believing that this trading as carried on was detrimental to its interests because it resulted in practically ignoring the commission law, took measures to stop it.

Dissemination of News.—Experts say that it takes an item of unexpected outside news about fifteen to thirty minutes to make itself felt in the New York Stock Exchange, and it takes about as short a time for news originating on the floor of the Exchange to reach the "tickers" outside. It now takes less than three minutes to get back a cable answer from London.

"How's London?"—The following is abridged from an excellent statement by W. P. Hamilton of *The Wall Street Journal* of the way London quotations are received:

The first question anybody puts to anybody else, on arrival at his Wall Street office at 9:30 or so in the morning, is, "How's London?" The London quotations are the first real lead on our market. They to some extent indicate what will be the popular view of the news which has developed over night. There are times when the London view is immaterial. It is even often entirely at variance with that taken in this market. But when stocks are really active it is always important, and the London quotations are indispensable to any forecast of our day's trading.

A few minutes before 2 P. M., London time, the quotations for American stocks in the London market are obtained for transmission to New York. It takes, perhaps, eight minutes to collect these prices and transmit them in code form. The presses in New York are waiting. The code is rapidly translated. The equivalent is calcu-

lated at the ruling rate of demand sterling, and in twenty minutes from the receipt of the cable the quotations are being read in the brokers' offices.

London deals in American stocks at a fixed rate of $5 for the pound sterling. The reason for this is that the rate of exchange is constantly changing. If the real quotation were taken for transactions there would be a continual dispute as to what the rate was at the time the bargain was made. A fixed figure makes no difference to the trader in London who buys and sells at the same conventional rate. We, however, cannot afford to give more than the rate of exchange for the sovereign. Therefore, to get the difference between the London price and what the price of the stock would actually be here, we deduct the rate of exchange, say, $4.87½, from the conventional $5. It is obvious that if a stock is 50 in London it is 48.75, or 48¾, at the parity here.

There are difficulties in connection with the collection of prices in London which people used to New York Stock Exchange methods do not appreciate. Actual sales are not recorded there. The prices at which a few transactions have been made are marked on the official list, but there is no means of telling whether the market has dealt in 5,000 shares or 500,000 during the day. The London ticker only quotes bid-and-asked prices, and never records the price at which any particular transaction was done.

Under the rules of the London Stock Exchange, the quotation of a price by one member to another binds the member who quotes to buy 100 shares at his bid price, or sell 100 shares at his asked price, if the other member chooses to trade. This has the effect of securing a really close bid-and-asked price. It is also the reason why an arbitrage house will know the London market price better than any news agency can.

The London system has its advantages and its disad-

vantages. In our market the jobber's turn is saved, but, in an excited and feverish market, the broker may be hours before he can trade at all. In London he is always sure of being able to sell at some price or buy at some price—both very important conditions in a panicky market, when it often happens here that the broker has to offer the stock down indefinitely until he finds a purchaser. In the May panic of 1901 Jersey Central was offered down here from 153 to 102 without a single transaction. The stock was sold at 102 and the next transaction was 148. This would have been impossible in London. The jobber might have made a very wide price, but the broker would have been able to sell for his customer at worst within five points of the previous quotation.

Of the other member of the world's three great stock exchanges, the Paris Bourse and its outer adjunct, the Coulisse, a good account of operations in pre-war times was published by the National Monetary Commission, Washington, in 1910, under the title of "History and Methods of the Paris Bourse," by E. Vidal. [Sen. Doc. 573, 1911.] A later description by J. Edward Meeker is found in *The Street*, a New York weekly, of September 24, 1919.

REFERENCES

"Wall Street From Within," Wm. C. Van Antwerp, 1914, Chap. X: "The Paris Bourse; A Monopoly Under Government."

"The New York Stock Exchange," Francis L. Eames, 1894.

"The Stock Exchanges of London, Paris and New York," George R. Gibson, 1889.

"The Stock Exchange" (London and New York), F. W. Hirst, 1911.

"The Stock Exchange and Its Machinery," R. W. Babson.

"The New York Stock Exchange," M. King, 1904.

"Treatise on the Laws of the Stock Exchange," Schwabe and Branson.

"The Paris Bourse and Public Finance," William Parker, New York, 1920.

"Rules and Usages of the Stock Exchange" (London), 1901.
"Treatise on the Law of Stock Brokers and Stock Exchanges," John R. Dos Passos, 1905.
"Consolidated Stock Exchange of New York," S. A. Nelson, 1907, Chap. I.

CHAPTER XI

NEW YORK STOCK EXCHANGE CLEARING-HOUSE

The growth of the stock market is limited only by the ability of the money market to supply the necessary banking accommodations. No active broker, unless possessed of immense resources, could transact a large business without the temporary credit extended to him by his bank through certification of his checks. There is a limit to the ability and willingness of the banks to extend the benefit of such certification.

That limit seemed to be reached in 1892, when the banks, alarmed by the large certifications required by the brokers, threatened action, which finally forced the Stock Exchange to adopt a system that would reduce the volume of required certification. The result is the Stock Clearing-House of the New York Stock Exchange. For many years there had been agitation in favor of stock clearances. As early as 1857, only four years after the establishment of the Bank Clearing-House, it was proposed to extend the same system to stocks. During the period of the exciting speculation in gold after the war, transactions in gold were cleared with success through the New York Gold Exchange Bank, although the system did not commend itself as one adapted to stocks. The first stock-clearing system was successfully established in Frankfort in 1867, and was speedily adopted by Berlin, Hamburg, Vienna, and London. At various periods attempts were made to found a Stock Clearing-House in New York, but they all ended in failure. In

1883, Comptroller of the Currency John J. Knox called attention to the London Stock Clearing-House, and suggested the adoption of a similar system as the means of reducing the evil of overcertification.

In 1892 R. L. Edwards, President of the Bank of the State of New York, which did a heavy business with brokers, wrote to the president of the Exchange, stating that there would be a probable curtailment of certification unless something was done. Then, mainly through the labor of Francis L. Eames, the present stock-clearing system was adopted and went into effect on May 17th, the one hundredth anniversary of the brokers' agreement of 1792, out of which the Stock Exchange grew.

For many years the Philadelphia Stock Exchange had had such a system in successful operation, and the Boston Exchange had recently adopted it. In European cities, as has been stated, clearances had long been in operation. But the European system was and still is based on fortnightly settlements, and the New York Exchange, long accustomed to daily deliveries of stock, preferred a system of daily clearances. Although late in adopting this clearance system, the New York Stock Exchange has succeeded in establishing one which, for the extent of its transactions and its adaptability to the growing business of the country, has no equal anywhere.

If this Exchange [wrote the Special Committee of the Exchange in 1892 in recommending clearances] is to take the proper place in the future among the stock-markets of the world, a system of doing business will be required which will stand the strain of a volume of business larger than any heretofore known. Our present system of actual payment of entire value in every transaction blocks up in active times both banks and offices to an intolerable extent, and is an obstacle to the growth of the business commensurate with the growth of the country. For causes well understood, the banking facilities for this business have not increased during recent years. A proper system of clearing by largely reducing the volume of checks

and deliveries would relieve both offices and banks of much of the confusion and risk with which we are so familiar.

Legality.—Speaking of the legality of clearances, the report said:

> The laws of this State require in all contracts an intent to deliver. At the present day, on the various exchanges, transactions in securities and agricultural products have reached such magnitude that to pass the actual property or warehouse receipt or the certificate of stock into the hands of each party to every contract is impossible. The business of the world is now too large to be transacted in that way. Contracts on which the actual delivery of the property can be enforced if desired make the markets of the world.

The report states that the courts have held that such contracts show the required intent to deliver and are thus legal.

The Stock Exchange Clearing-House has fulfilled every prediction made in this report. Writing in 1894, two years after its establishment, Mr. Eames said that "during the panic of 1893 failures on the Stock Exchange would have been vastly more numerous had there been no clearing system in operation." So, in the unequaled speculation of 1901, the clearing system proved more than adequate to every demand upon it. As a matter of fact, it has expanded to an almost unlimited degree the capacity of the stock market. With its aid the mechanism of Wall Street appears powerful enough to conduct easily and well all the possible operations of the future. The importance of the Clearing-House can, therefore, be scarcely overestimated.

It is conceded that it would have been impossible to have transacted the stock business of 1901 ex Clearing-House. The machinery of the Street would have broken down. Even on the panic day of May 9, 1901, when the total sales of stocks were 3,336,695 shares, and when the

Street was convulsed by the tremendous fall in prices, there was no failure of the Clearing-House system. Transactions of the 9th were cleared as usual on the 10th, with the following result:

Shares cleared both sides, including balances	12,131,600
Total value both sides, contracts and balances	$961,300,000
Share balances one side	1,714,800
Value share balances one side	$129,800,000
Cash balances one side	$5,461,700
Number of parties clearing	452
Banks certification obviated	$221,050,000

On the same day the transactions of the Bank Clearing-House (the heaviest on record up to that time) were $622,410,525, or nearly $339,000,000 less.

The Stock Clearing-House, however, has done a larger business even than that of May 10th. Inasmuch as there are no clearances dated on Saturday, the clearances of May 6th, 1901, represented two days' transactions. On that day the shares cleared both sides amounted to 13,-313,800, having a value of $1,132,200,000. Over one billion dollars in one day! The bank certifications obviated amounted to $286,100,000.

The statistics for the two years 1893 and 1901 are of interest as summing up the operation of the system in periods of panic and boom.

	1893	1901
Shares cleared both sides, including balances	256,335,400	926,347,300
Total value both sides, contracts and balances	$16,169,800,000	$77,853,500,000
Share balances one side	24,742,700	134,391,000
Value share balances one side	$1,470,700,000	$10,930,853,000
Cash balances one side	$33,116,400	$116,849,300
Certification required	$1,470,700,000	$10,930,853,600
Certification obviated	$5,143,300,000	$17,065,042,800
Certification that would have been required without clearances	$6,614,200,000	$27,995,896,400

These sums are so great as to be beyond human comprehension. The highest monthly total of stock clearances in London was, in July, 1901, £875,728,000. The average daily saving to the banks in New York in certifications amounts to more than $50,000,000.

Capacity.—The Stock Clearing-House is capable of indefinite expansion; there seems to be no limit to the amount of business it could do. It has handled about 100,000 items in one day. One broker alone has turned in about 1,300 items. If the other 490 firms did the same there would be 637,000 items in one day. It follows, therefore, that the Clearing-House can handle at least six times its business in 1901, and that is an underestimate.

Through its operation 65 per cent of all the shares dealt in are eliminated in deliveries, and more than 90 per cent of the number of checks is done away with. At the time this was written 87 stocks were regularly cleared, these representing over 85 per cent of the total sales of the Exchange. All sales in these stocks are cleared, except at the time they are made it is expressly stipulated that they shall be ex Clearing-House.

Simplicity of System.—The operation of clearing is simplicity itself. A sells 100 shares of Atchison to B, who likewise sells 100 shares of the same stock to C. Now, instead of A delivering the stock to B, and then B delivering it to C, which was the method of business before the Clearing-House was established, A, under the new system, delivers the stock directly to C.

This operation is precisely the same as that which forms the basis of foreign exchange. But in stock clearances the balances are settled in both stocks and money. This duality of settlement is what makes the stock clearing system so puzzling to those not instructed in its methods. In reality the system is not at all complicated. The reason for the double settlement may be easily

reasoned out. In the example given, A must deliver to C stock he has sold to B, but the price at which he has sold to B may be different from that at which C bought of B. Consequently there must be a settlement price established, so that clearances may be made equitably. It follows that there must also be a cash settlement to make up the difference between the contract or purchase price and the settlement price. This may be made clearer by two simple illustrations.

A sells 100 shares of Atchison at 75 to B, who sells the same amount to C at 76. The clearance then proceeds as follows: A is directed to deliver the stock to C, who pays him 76 for it. But as A sold to B at 75, he gets $1 a share, or $100 for the 100 shares, more than is due him. So A draws his check for $100 to the order of the Clearing-House and delivers it with his clearance sheet. C having got his stock at the price he contracted to pay for it, is satisfied. B having bought at 75 and sold at 76, has no delivery of stock to make, but he has a profit of $100 coming to him, so he draws a draft on the Clearing-House for that amount. What is the result? A gets 76 for the stock he has sold minus $100 paid to the Clearing-House. C gets the stock at the price he has contracted for, and B, who both bought and sold, gets his profit of $100. The Clearing-House having received $100 from A, has paid the same amount to B.

In Clearing-House transactions the firm that buys and sells the same stock clears the transaction on its own sheet, drawing on the Clearing-House for the amount of the profit, or paying to the Clearing-House the amount of the loss, as the case may be. But when the firm delivers its stock it delivers at a fixed delivery price, and must credit or debit itself for the difference between the delivery and the contract price. In other words, the delivery price applies only to stock balances that must be delivered.

To make the operation clearer another illustration must be given. A sells to B 200 shares of Atchison at 75. B sells 200 shares of Atchison to C at 76, and 200 shares of Union Pacific at 100. C sells A 100 shares of Union Pacific at 101. The delivery or settlement price of Atchison is 77, and of Union Pacific 99. The clearance will then proceed as follows: A delivers 200 Atchison to C; B delivers 100 Union Pacific to A and 100 to C. C has no delivery, but receives 100 Union Pacific from B and 200 Atchison from A. As A, under the delivery price of 77, receives $400 more for the 200 Atchison than the selling price of 75, and will pay 99, or $200, less for 100 Union Pacific than the contract price of 101, he is a debtor of the Clearing-House for $600. B clears 200 Atchison at $200 profit, the difference between the contract purchase price of 75 and the contract selling price of 76. But in delivering 200 Union Pacific to A and C at the delivery price of 99, he gets $200 less than under the contract selling price of 100. So B is a creditor of the Clearing-House for $400. C clears 100 shares of Union Pacific at a profit of $100, the difference between the contract purchase price of 100 and the contract selling price of 101, but he pays $100 less for the 100 Union Pacific he will receive from B under the delivery price of 99 than he contracted to pay, so these two items balance each other. C pays, under the delivery price of 77, $200 more for his Atchison than the contract price of 76, and has therefore a credit of $200 at the Clearing-House. The Clearing-House would receive $600 from A, and pay $400 to B and $200 to C, and the deliveries of balances of stocks would then proceed as already indicated.

This illustration shows the process of clearance and the difference between contract and delivery prices, but inadequately indicates the advantages of the Clearing-House in reducing deliveries and obviating certifications. The

operation of clearance looks simple when reduced to this alphabetical form, but when the operations of nearly 500 firms, each making many purchases and sales every day, are to be cleared, the system, while precisely the same, is working on so large a scale and in so many different stocks that it is not surprising that the outsider, in trying to understand it, gets lost in the maze of stock deliveries and cash settlements. In the practical working of the system, however, there is nothing involved or uncertain; never once has the machinery broken down or become clogged. In panic and in boom it has worked with precision, accuracy, and secrecy.

Description.—For the sake of an illustration it is necessary to go through the forms of an actual clearance.[1] The firm of Wilson, Morgan & Company, of 45 Wall Street, has, through its board member, Mr. Morgan, bought or borrowed 1,500 shares of Steel, preferred, at varying prices from eight different firms, 700 shares of Atchison from one firm and 700 of Union Pacific, preferred, from another. On the same day it has sold or loaned 700 shares of Atchison to one firm, 1,000 shares of Union Pacific, preferred, to five firms, and 1,300 shares of Steel, preferred, to one firm. This was not a very large day's business, but it is better for the purposes of illustration than much greater operations would have been. Yet, even on this day, Wilson, Morgan & Company had had dealings with seventeen different firms, bought 2,900 shares of stock and sold 3,000. Under the old no-clearance system it would have had to make seventeen different settlements on this day, involving the sum of $519,411.14. But by means of the Clearing-House it is enabled to settle the whole business by drawing a draft for $461.14 and delivering 300 shares of Union Pacific, preferred, for which it receives a check for $26,400, and by accepting 200 shares of Steel, preferred,

[1] The names used are fictitious.

for which it gives a check for $18,800. The clearance is therefore reduced from seventeen deliveries to two, and from seventeen checks amounting to $519,411.14 to three checks amounting to $45,661.14.

This is by no means an uncommon case. Many might have been given in which the process of elimination was greater. There has been one instance in which 204,000 shares, valued at $12,500,000 on one side, have been settled by a payment of about $10,000.

Mr. Morgan having made his purchases and sales in the Board-Room, reports them by telephone to his firm. In ex-Clearing-House transactions comparison slips would now have to be made out, but in Clearing-House transactions clearance or exchange tickets take their place. The seller is obliged to send to the office of the buyer a ticket printed in red on white paper to distinguish it from the buyer's ticket, which is printed in black on yellow paper. This record is in the form of an order on the Clearing-House for the delivery or the receipt of the stock. For instance, Wilson, Morgan & Company having bought 100 Steel, preferred, at 94⅜, from Watson, Hubert & Company, receive from that firm a white paper ticket printed in red of the form given on page 173 (No. 1).

Wilson, Morgan & Company compare this ticket with their own record of the transaction, and if the two agree the firm gives in exchange a yellow ticket that it will receive 100 shares of Steel, preferred. The firm having sold 100 Union Pacific, preferred, at 88¼, to Roberts, Blair & Company, sends to its office a white-red ticket like that it has received from Watson, Hubert & Company. Roberts, Blair & Company compare the ticket with their record, and, if found correct, give a yellow-black ticket—of the form given on page 173—in exchange (No. 23).

Having made these comparisons and exchanges of tickets with all the firms with which it has had dealings, Wilson,

EXD_______

CKD_______

CLEARING-HOUSE OF THE

NEW YORK, Jany 22 1902 OFFICE ADDRESS, 45 Wa

RECEIVE FROM	SHARES	STOCK	PRICE	AMOUNT
Watson, Herbert & Co	100	Steel Pfd		9437 5
J. Smith & Co	3	"		28300
H Clews & Co	5	"		47187 5
J Wallace & Co	2	"		18875
T C Brown & Co	1	"		9450
Harriman & Co	1	"		9437 5
C I Hudson & Co	1	"		9450
R. Hatch & Sons	1	"		9437 5
W. Jones & Co	7	Atch Com		52500
H T Carey & Co	7	Mo Pac Pfd		61600
Bal. to Deliv	3	Mo Pac Pfd		26400
	Diff			4611
	3200			2825361

ENTER ON THIS SHEET ONLY THOSE TRANSACTIONS FOR WHICH TICKETS HAV

THE CLE

YORK STOCK EXCHANGE NO 575

CLEARING SHEET OF Wilson Morgan & Co

DELIVER TO	SHARES	STOCK	PRICE	AMOUNT
Geo Lamb & Co	700	Atch Com.		53210 34
Roberts Blair & Co	1	Mo Pac Pfd		88 25
A Leo & Co	2	"		17675 80
Smith O'Brien & Co	1	"		88 25
C Bauersfeld & Co	5	"		441 25
J S Bache & Co	1	"		88 75
L. Van Hoffman & Co	13	Steel Pfd		12220 0
Bal. to Rec.	200	Steel Pfd		188 00
	3200			2825361 4

…DHANGED. THE TICKETS MUST AGREE OR BOTH PARTIES WILL BE FINED.

…SHEET

No. 23 *New York,* Jany 22 1902

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE,

RECEIVE FROM Wilson Morgan & Co

100 *shares* Mo Pac Pfd @ $ 8825 —

for account of the undersigned. Roberts Blair & Co

BUYERS' CLEARANCE TICKET

No. 1 *New York,* Jany 22 1902

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE.

DELIVER TO Wilson Morgan & Co

100 *shares* Steel Pfd @ $ 9437 50

for account of the undersigned. Walton Herbert & Co

SELLER'S CLEARANCE TICKET

Morgan & Company now make up their clearance sheet for the day's transaction with the result shown in the folder opposite the preceding page.

As the firm has bought or borrowed and sold or loaned 700 shares of Atchison, all that it is necessary to do is to ascertain the difference between the buying contract price and the selling contract price. As it bought 1,500 shares and sold 1,300 shares of Steel, preferred, it can clear on its own sheet 1,300 shares in like manner by ascertaining the difference in contract prices, leaving a balance of 200 shares to be received. As it bought 700 Union Pacific, preferred, and sold 1,000 shares, it can clear 700 shares by finding the difference between the contract prices, leaving 300 shares to be delivered. As these deliveries are to be made at the fixed delivery prices, the firm must ascertain the difference between the contract and delivery prices to ascertain what is its credit or debit. The firm bought the 1,500 shares of Steel, preferred, for $141,575, and sold 1,300 shares for $122,200, leaving $19,375 as the cost of the remaining 200 shares. But as the delivery price is 94, it will actually pay only $18,800 for the stock on delivery. So that it is debited for $575 to the Clearing-House, which will pay the sum to the firm or firms to which it rightly belongs. The profit on the 700 shares of Atchison is $710.34, which is therefore due the firm from the Clearing-House. There now remains the Union Pacific, preferred, 700 of which were bought for $61,600 and 1,000 sold for $88,325.80. It is due to receive, therefore, $26,725.80 for the 300 shares more that have been sold than bought, but under the delivery price it will receive only $26,400, so that a balance of $325.80 is due it from the Clearing-House. It appears, therefore, that the firm is debtor $575 to the Clearing-House and creditor $710.34 and $325.80, or a total of $1,036.14, leaving a credit balance of $461.14.

It is all a matter of simple bookkeeping. The firm now


Clearing House of the N.Y. Stock Exchange

Approved.

Manager

New York, 190

Manhattan Company

Pay to the order of the undersigned

Dollars

as advised this day by the Clearing House of the N.Y. Stock Exchange.

The Clearing-House Draft

draws a draft for its credit balance on the Manhattan Company, with which the Clearing-House keeps its account. The form of this draft is shown on the preceding page.

This draft, together with the clearance sheet and all the exchange tickets it has received from the firms representing the other side to the transactions, Wilson, Morgan & Company deliver at the Clearing-House within four

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE

THE UNDERSIGNED WILL **DELIVER** THE FOLLOWING **BALANCE** OF STOCK

SHARES	STOCK	DELIVER TO	
300	M. Pac Pfd		

DATE 4/22/02 NAME Wilson, Morgan & Co No. 575

STATEMENT OF STOCK TO DELIVER

hours after the close of the Exchange, on the day that the transactions are made, except Friday. Friday's and Saturday's sheets are turned in on Saturday and the clearance is made Monday. The other firms will send to the Clearing-House the tickets Wilson, Morgan & Company have given out, so that both sides have complete vouchers for the sale and the Clearing-House has full authority to clear. If Wilson, Morgan & Company's sheet, instead of showing a credit in their favor, had shown a debit, it would have sent, instead of a draft, a check for the amount of the debit on the firm's own bank.

At the same time it delivers the sheet at the Clearing-House it must hand in statements of the amount of stock it has to deliver or to receive on balance, in the form shown on page 176.

The Clearing-House, having in the meantime examined and audited all the items and made up its allotment sheets, will the next day at 9.30 A. M. return this statement to Wilson, Morgan & Company, with the name of the firm to which it must deliver the Union Pacific, preferred, or from whom it must receive the Steel, preferred, as the case may be. About noon of the same day it will receive back the draft, with the signature of the manager written in the margin under the word "Approved." This draft it will deposit in its bank and collect through the Bank Clearing-House. This closes the firm's dealings with the Clearing-House for the day, but it must now deliver the 300 Union Pacific, preferred, to the firm indicated by the Clearing-House, and for this it will receive $26,400 and must accept 200 shares of Steel, preferred, for which it must pay $18,800. When the accounts are balanced the result will be exactly the same as if it had had separate settlements with each of the other seventeen firms with which it had dealings the day before. The difference is that it has saved time, trouble, and, above all, the extra bank certification of checks involved in ex-Clearing-House transactions. Failure to deliver or receive stock after passing through the Clearing-House is dealt with under the rules of the Exchange governing failures to fulfill contract.

It may be remarked that the Clearing-House in cases of insolvency has saved much of the time and loss involved in making settlements. For the service performed by the Clearing-House each firm pays 2½ cents per 100 shares of $100 par value. Only 100-share lots and multiples thereof are cleared. No bonds are cleared except on special occasions. Fines are imposed for mistakes and delays in

delivering sheets, etc. Tickets that are exchanged and sent to the Clearing-House must agree, or both parties are fined.

The delivery prices are established by the Clearing-House every afternoon. These are as near as possible to the closing prices of the day, avoiding all fractions, and as soon as established are sent over the tickers.

The whole system of stock clearances on the outside of the Clearing-House has now been explained. The system within the Clearing-House is fully as simple, accurate, and clear. Since 1919 the work, to facilitate operations, has been divided into a Day Clearing and a Night Clearing Corporation, each with a different manager and organization. Everything is systematized as completely as in a bank. Each clerk has his appointed place and duty. The clerks at the windows who receive the clearance sheets and tickets examine the items and total to see that they are properly made out, and then they are passed to other clerks, who audit them carefully. The exchanged tickets are distributed in tiers of boxes like mail in a post-office, and these tickets are taken to clerks who compare them with the clearance sheet. The tickets for delivery of stock balances are also sorted and taken to the clerk who makes out the allotment sheets. Each stock has its own sheet, on the debit side of which are put the names of those due to receive stock, and on the credit side those who will deliver. It is now comparatively easy to make the allotments, as the specimen sheet on page 179 will show.

J. Dowson & Company deliver 200 to C. Jones & Company; Helm Hayes & Company, 400 to V. W. James & Company and 100 to J. C. Warwick & Company; Rollins Brothers, 100 to J. P. Smith & Company; H. L. Henry & Company, 100 to Lawson & Brown; C. H. Krouse & Company, 300 to Cullen & Mullen; Lamb Brothers & Company, 300 to the same firm; and J. C. Lee, 300 to Crosby, Jackson & Company. Of course there are always as many stocks

ST. LOUIS & S. F. 2ND PREF. BALANCES Jany 22 1902

No.	Shares	Will Receive		No.	Shares	Will Deliver		
1	100	J. P. Smith & Co		1	200	J. Dawson & Co	2	7
2	2	C. Jones & Co		2	5	Helme Hays & Co	4	6
3	1	Dawson & Brown		3	1	Rollins Bros	1	
4	4	V. W. James & Co		4	1	H. L. Henry & Co	3	
5	6	Cullen & Mullen		5	3	C. H. Brooke & Co	5	
6	1	J. C. Warwick & Co		6	3	Lamb Bros	5	
7	3	Crosby Jackson & Co		7	3	J. C. Lee & Co	7	
	18				18			
8				8				
9				9				
10				10				
11								
12								
13								

THE ALLOTMENT SHEET

bought as there are sold, so that both sides of the sheet will exactly balance.

Secrecy.—The establishment of the stock clearance system was long opposed because of fear that the clearance sheets would give too much information about important operations to the clerks in the Clearing-House. Experience has demonstrated that operations are as readily concealed under the new as the old system. Loans of stock, for instance, appear on the clearance sheets as sales, and any clerk seeing the sheet could not tell whether the transactions were loans or sales, and therefore the sheet would have no meaning to him. Likewise stocks that appear as having been bought may have really been borrowed in operations on the short side. Large operators nearly always employ two or more brokers, and conceal their operations by arranging their orders so as to prevent any one from knowing what they are really doing. Even a broker may not be able to tell whether his customer is really a bull or a bear, for while the operator may be buying through this broker he is selling through another. How much less, therefore, can the clerk in the Clearing-House comprehend what he may see of the transactions of the brokers. Besides, the work of the Clearing-House is distributed among many persons. One clerk sees only one small part of what is going on, just as a common soldier sees only the small section of the battlefield in which he is fighting, and is probably in entire ignorance of how the battle as a whole is progressing. The work must be done too quickly for close inspection, and, moreover, it is facilitated by the use of numbers. Each member and firm has a number, which he must stamp on everything he sends to the Clearing-House, and allotments are made and clearances consummated very largely by the use of these numbers. Persons are of no account in the Clearing-House. It looks merely at numbers, balances, and exchanges.

The Clearing-House guards its secrets strictly, and there has never been an instance of any disclosure of information that should be kept private. Clearance sheets and tickets are returned to the different firms after the clearance has been consummated. The Clearing-House keeps no records. Necessarily in making clearances it audits the great bulk of the transactions of the Exchange, no small service in itself.

New York and London.—Widely different methods of clearing prevail in New York and London. Against the latter's fortnightly "settlement days," on the New York Exchange, to quote Van Antwerp, "everything is settled on the day following the transaction. Each broker and each customer knows just where he stands, and every trade is settled in full when the day ends. Tell the English broker that on a single day our Clearing-House settled and balanced transactions in more than 3,000,000 shares of an approximate value of £50,000,000 sterling and he gasps. He says that such a thing would be impossible in London, and he is right: it would be impossible, indeed. Clearings in London vastly exceed ours, but they do not occur daily; indeed, our system would not do at all in a center that transacts, as London does, a large international business in which transfers must be sent hourly to Egypt and India and to all quarters of the globe."

REFERENCES

"The Stock Exchange From Within," William C. Van Antwerp, 1914, Chaps. IX-X.

"Stock Exchange Clearing-Houses," A. D. Noyes, *Political Science Quarterly,* VIII, 252.

"By-Laws of the Stock Clearing Corporation," New York, 1920.

"The Stock Clearing Corporation" (pamphlet), 1920.

"Term Settlements: A Study of Clearing and Settling Security Contracts on Foreign Stock Exchanges," Samuel F. Streit, American Acceptance Council, New York, 1920.

CHAPTER XII

TOOLS OF WALL STREET

"Our current political economy does not sufficiently take account of time as an element in trade operations," said Walter Bagehot. The Wall Street system, however, takes large account of time. Every part of its mechanism is regulated, as it were, by a time clock.

Most of the tools of Wall Street are time-savers. The six most important are:

The stock-indicator.

The telegraph.

The cable.

The telephone.

The news slips.

The market reports.

There was active speculation before the introduction, in 1867, of the stock-indicator, or "ticker" as it is called, but it is difficult to conceive now of a market deprived of its use and compelled to rely upon quotations carried by brokers from office to office. The very life of the Street seems to depend upon accurate, immediate and continuous quotations from the Stock Exchange.

The Tape.—These are provided by the stock-indicator, a marvelous little instrument which prints upon a narrow ribbon of paper the sales and prices made in the Board-Room. The paper, which is in a roll or spool, feeds itself into the ticker, and after receiving there the printed impressions falls into a basket placed beside the machine.

In the vernacular of the Street this paper is called the "tape."

The Exchange has always zealously guarded its quotations, and has endeavored to prevent them from reaching rival institutions or the bucket-shops. But it supplies the quotations to its members and the outside public simultaneously. Its own corps of reporters obtain the sales as they are made in the Board-Room and carry them to several telegraph stations placed in convenient parts of the room. These send the quotations instantly to a gallery where the employees of the two ticker companies are stationed. One of these, the New York Quotation Company, is owned and controlled by the Exchange, and it supplies the quotations to its members. Its tickers, about 1,900 in number, do not extend outside of the Wall Street district. The other company, the Gold and Stock, is independent of the Exchange, but gets the quotations simultaneously with the other, and has the right to sell them, under certain restrictions hereafter noted, to any one desiring them. As a matter of fact, tickers are to be found in almost every public place. They are indispensable adjuncts of every banking and brokerage office.

A number of years ago the Stock Exchange had a long controversy with the then existing ticker company. It was charged that the latter supplied indicators to bucket-shops, and the Exchange was bound to break up this abuse of its quotations. The controversy was carried into the courts, and the question was raised as to the right of the Exchange to withhold its quotations from the public. In the end the Exchange made a satisfactory contract with the company supplying the public with quotations, and established its special service for its own members.

While the quotations are reported as soon after they are made as it is possible to gather them, it takes some time, of course, to get them to the indicator, and it follows

that the ticker is always a little behind the actual market. On an ordinary day the difference in time between, say, the close of the market and the record of the final sales on the tape may not amount to more than one or two or three minutes; but on a very active day, when the transactions are heavy, it has taken from fifteen to twenty-five minutes to record the accumulation of sales. On November 12, 1919, when prices were tumbling and dealings were on an immense scale, this wonderful piece of mechanism continued to reel off quotations for forty-one minutes after the three o'clock gong sounded the close of the day's trading.

Abbreviations.—As there are over eighteen hundred different stocks and bonds more or less regularly traded in at the Exchange, many of them bearing the long names of their corporations, it is necessary to use abbreviations in reporting quotations on the tape. To the uninitiated, the tape appears to be a meaningless jumble of letters and figures. But the broker and regular habitué of the Street soon learn to read it at sight. A large chart containing the abbreviations goes with each ticker, but it is rarely consulted. Here are the abbreviations used for a few of the more active stocks:

A	Atchison, Topeka & Santa Fe.
B	Brooklyn Rapid Transit.
C	Anaconda Copper.
D	Denver and Rio Grande.
E	Erie.
G	Consolidated Gas (N. Y.).
H	New York & Harlem.
J	Central Railroad of New Jersey.
K	Missouri, Kansas & Texas.
L	Louisville & Nashville.
M	International Mercantile Marine.

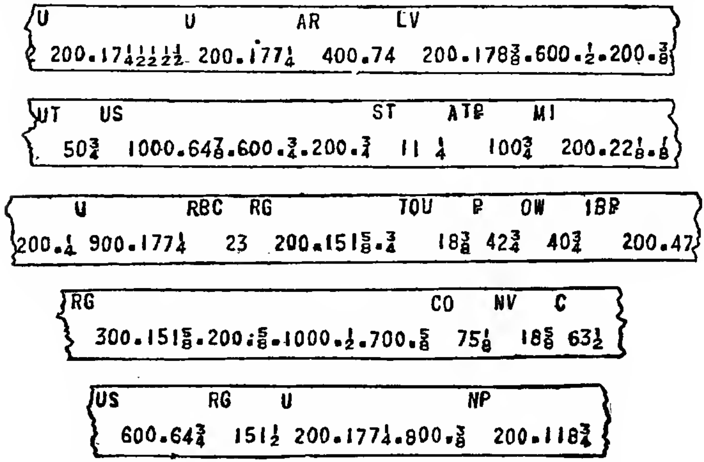
N	Norfolk & Western.
P	Pacific Mail.
Q	Chicago, Burlington & Quincy.
R	Reading.
S	American Sugar Refining Co.
T	Texas & Pacific.
U	Union Pacific.
W	Western Union.
X	United States Steel.
BO	Baltimore & Ohio.
CA	Canadian Pacific.
DL	Delaware, Lackawanna & Western.
GM	General Motors.
HR	International Harvester Co.
IP	International Paper Co.
LT	National Lead Co.
MM	St. Paul, Minneapolis & Manitoba.
NP	Northern Pacific.
OW	New York, Ontario & Western.
PA	Pennsylvania R. R.
RY	Railway Steel Springs.
SB	Seaboard Air Line.

PR	Preferred.
X	Ex-dividend.
UR	Under the Rule.

Several of the abbreviations are responsible for the popular Street nicknames of leading stocks. For instance, because MP stands on the tape for Missouri Pacific, that stock is generally called "Mop." NP stands for Northern Pacific, which goes by the name of "Nipper," the common being called "little" and the preferred "big." PO standing for People's Gas Light and Coke Company, that stock is often called "Post-office." The same law of economy in the use of words applies to all the active stocks.

Language of the Tape.—On this page is a facsimile of a stock tape just as it came from the ticker.

This being interpreted reads: 200 shares Union Pacific at 17¼, mistake, and thrown out; 200 shares Union Pacific at 177¼; 400 American Smelting & Refining at 74; 200 Lehigh Valley at 178⅜; 600 do. at 178½; 200 do. at 178⅜; 100 shares Utah Copper at 50¾; 1,000 shares United



THE STOCK TAPE AS IT COMES FROM THE "TICKER"

States Steel at 64⅞; 600 at 64¾; 200 at 64¾; 100 Chicago, Milwaukee & St. Paul at 111¼; 100 American Tobacco, preferred, at 100¾; 200 Miami at 22⅛; 100 at 22⅛; 200 at 22¼; 900 Union Pacific at 177¼; 100 Republic Iron & Steel at 23; 200 Reading at 151⅝; 100 at 151¾; 100 Toledo, St. Louis & Western at 18⅜; 100 do. preferred, at 42¾; 100 Ontario & Western at 40¾; 200 Interborough Metropolitan, preferred, at 47; 300 Reading at 151⅝; 200 at 151⅝; 1,000 at 151½; 700 at 151⅝; 100 Chesapeake & Ohio at 75⅛; 100 Nevada Consolidated Copper at 18⅝; 100 Amalgamated Copper at 63½; 600 United States Steel at 64¾; 100 Reading at 151½; 200

Year	No. of Shares Traded in	Approximate value	No. of Impressions on Stock Tape
1890...........	71,282,885	$ 3,977,664,193	7,200,000
1891...........	69,031,689	3,812,247,419	7,200,000
1892...........	85,875,092	4,874,014,262	7,104,010
1893...........	80,977,839	4,550,260,916	6,900,700
1894...........	49,075,032	3,094,942,769	5,500,000
1895...........	66,583,232	3,808,338,604	6,814,900
1896...........	54,654,096	3,329,969,940	6,324,000
1897...........	77,324,172	4,973,553,065	8,232,000
1898...........	112,699,957	8,187,413,985	10,324,600
1899...........	176,421,135	13,429,291,715	11,931,700
1900...........	138,380,184	9,249,285,109	10,217,100
1901...........	265,944,659	20,431,960,551	12,830,500
1902...........	188,503,403	14,218,440,083	11,139,900
1903...........	161,102,101	11,004,083,001	10,276,100
1904...........	187,312,065	12,061,452,399	9,874,700
1905...........	263,081,156	21,295,723,688	10,420,400
1906...........	284,298,010	23,393,101,482	10,738,100
1907...........	196,438,824	14,757,802,189	8,808,200
1908...........	197,206,346	15,319,491,797	9,553,600
1909...........	214,632,194	19,142,339,184	10,130,400
1910...........	164,051,061	14,124,875,897	8,260,100
1911...........	127,208,258	11,003,600,829	7,719,840
1912...........	131,128,425	11,562,129,835	8,386,600
1913...........	83,479,693	7,170,862,086	6,964,700
1914...........	47,900,568	3,898,414,285	5,388,300
1915...........	175,145,203	12,661,478,002	11,244,400
1916...........	238,311,993	18,868,840,955	12,811,800
1917...........	185,628,948	15,609,335,098	11,323,100
1918...........	144,118,469	12,482,631,916	10,939,400
1919...........	316,787,725	25,904,887,816	14,205,700

Union Pacific at 177¼; 800 at 177⅜; 200 Northern Pacific at 118¾.

"The letters and figures used in the language of the tape," said a noted Boston operator, "are very few, but they spell ruin in ninety-nine million ways."

Notwithstanding the abbreviations, the number of printed impressions every day is very large, although much less than the number of shares sold. For instance, on April 30, 1901, when 3,234,339 shares were sold, besides a large

number of bonds, the printed impressions on the tape numbered 79,200. The New York Quotation Company has a delicate little machine for taking an accurate count of the characters printed on the tape, and it has kept a record for a number of years past. Their record is on page 187, to which is added the number of shares of stock traded in and their approximate value.

In 1919 it took 191,800 pounds of paper to supply the tickers of the New York Quotation Company, including the stock and bond systems.

The chart below, intended to show the volume of stock and bond transactions from 1890 to 1901, may also be taken as a bird's-eye view of the stock-market movement. Only 1919 exceeded the transactions of 1901.

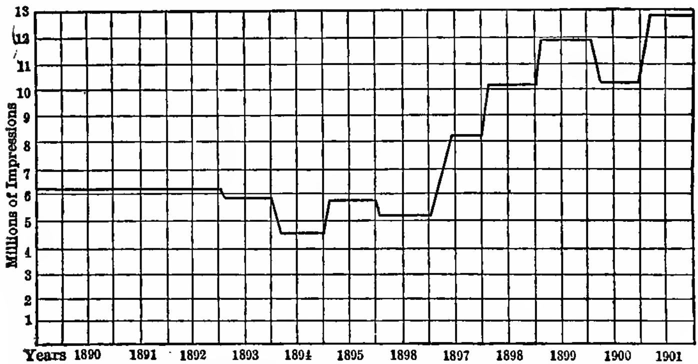


Chart Showing Number of Impressions on Tape

The ticker, among its other offices, is a time-keeper for the Street. The rule for delivery of stocks being very strict, and the time for delivery expiring at 2.15 P. M., the ticker every day at fourteen minutes after two prints "time" on the tape, and shortly after the instrument gives fifteen distinct beats, at the end of which it is exactly settlement time. Not a few timepieces in the Street are regulated by the tape.

Besides about 1,900 stock tickers operated by the New York Quotation Company, the Gold and Stock Company operates 1,045 tickers which are rented to customers in Greater New York and suburban localities. No one can rent one of these machines whose name has not been approved by a committee of the Exchange. This rule is being observed to prevent the tickers being placed in bucket-shops. Besides the stock tickers, there are 450 other machines, of which 140 report the grain and produce quotations of the New York Produce Exchange and the quotations of the Chicago Board of Trade, 230 give the quotations of the Cotton Exchange, and eighty report the quotations of the Coffee Exchange. There are also over a thousand other tickers supplying financial, sporting, and general news. Some of these tickers print the news on a broad ribbon of paper just as if it had come from a typewriter. Outside of New York there are twenty or more cities with ticker services of their own. No better proof is needed of the universality of speculation.

Quotations Non-official.—The Stock Exchange reports, but does not guarantee, its quotations. Every day at the close of the market a printer, as a private business enterprise, publishes a complete record of the day's transactions. This is a semi-official, but not an official, quotation list. The printer has the authorization of the Exchange, and he is obliged quickly to correct every error. The list occupies four pages of three columns each, with bid-and-asked prices of each issue. Moreover, the Exchange keeps no official statistics.

The Telegraph.—Of the value to Wall Street of the telegraph it is hardly necessary to speak, so universal has become the use of this great tool of business. Dr. Norvin Green, a few years ago, estimated that one person out of sixty in the United States made use of the telegraph, and that 46 per cent of all the messages transmitted applied

to speculative transactions. The percentage of speculative messages has undoubtedly increased since.

By wireless telegraphy practically all passenger vessels may now keep in touch with the stock market all the way across the Atlantic.

Many brokers lease wires to connect their Wall Street offices with branches. A firm with a dozen private wires is not exceptional in the service of the 500 or more New York brokerage house branches throughout the city and country.

The Cable.—The cable may be said to have almost revolutionized the commerce of the world. The transactions and prices of one market are, by its use, now known simultaneously in the markets of every other country. Distance and time have been annihilated. "We are of opinion," says Arthur Crump, in his "Theory of Stock Speculation," "that the complete communication that is now established between the commercial and monetary markets will tend gradually, if not rapidly, to diminish the effect of the commercial crisis."

The cable has put every market on a contemporaneous basis. The death of McKinley at Buffalo and that of Cecil Rhodes in South Africa was known in every great city of the world almost as soon as each event occurred; but seventy-five years ago the news of the death of Nathan Meyer Rothschild was carried to the London Stock Exchange by carrier pigeons. Several London brokers then maintained private systems of carrier pigeons connecting them with Paris. This was the early substitute for the cable.

James K. Medbury, writing three or four years after the establishment of the first working cable in 1866, the one laid eight years earlier having broken down, said that New York brokers were then paying $1,000,000 a year for London dispatches. Rates were very high in 1866. Twenty

words to London cost $100, as compared with $5 in 1912, and George Stoker, the cable-packer, began, by a system of codes, to pack several messages into one. In 1902, according to Vice-President Ward of the Commercial Cable, fully 95 per cent. of all cable messages were written in codes, so constructed as to make one word do the work of a dozen or more. Elaborate codes have been constructed, and by the aid of any of the code books one can cable and telegraph to any part of the world, securing economy with secrecy. Many concerns, moreover, have private codes.

The manager of one of the leading cable companies has estimated that fully two-thirds of all the cable business of this country with Europe emanates from New York, and 70 per cent. of that with South America. There are now seventeen trans-Atlantic cables in operation, and it is estimated that the average day's business is from 15,000 to 20,000 messages. While most cable messages are short, averaging four to six words, they tell a great deal. A banking house will sometimes pack a dozen or more cable transfers of money into one message. For the arbitrage business, now of little note, a cable company formerly set aside one of its London cables.[1] Amsterdam also has cable connections now. In the Exchange building telegraph and cable messages are sent by pneumatic tubes direct from the Board-Room to the telegraph offices.

Telephones.—In no other part of the world is the telephone put to such general and important use as in Wall Street, and its use has greatly increased in the last ten years, in both the stock and money markets. There were on June 1, 1920, 861,909 telephones in New York City, and there were 88,000 of these in service in the Wall Street district, that is, south of Fulton Street. About five hundred of the members of the Stock Exchange main-

[1] On December 1, 1920, the New York Stock Exchange reinstalled joint account arbitrage dealings, discontinued since 1913.—New York *Times*, of above date.

tain private telephone connection to the Board-Room. Practically every order executed in the Exchange is received by the Board member from his office over the telephone, and as soon as the order is executed he reports the sale, the price, and the name of the other party to the transaction over the telephone. Business aggregating often over $100,000,000 a day is thus actually transacted by telephone—a most impressive proof of the value of this invention, now in use less than 45 years. In the Exchange elaborate provision has been made for an extended use of the telephone. Notwithstanding the noise and confusion on the floor, and the fact that many brokers are shouting through the telephones at the same time, mistakes are very rare. Mistakes over the telephone, however, are probably no greater than occur in written communications. Curb brokers use hundreds of phones in adjacent buildings to communicate with their offices.

News Agencies.—Wall Street is always eager for the latest news. It is not content to rely on the morning and evening editions of the daily papers, or even upon the elaborate articles of the financial press. It must have the news the instant it develops. News is the very air that speculation breathes. To supply this need, two news agencies exist in Wall Street, one that of the New York News Bureau, and the other that of Dow, Jones & Company, founded by Charles H. Dow, one of the first to give a scientific form to stock-market reports. These two concerns issue every few minutes what are called the News Slips, which in the case of one firm are printed on yellow paper and in the case of the other on white. These slips are of convenient size, are printed on rapid presses, are distributed to subscribers by an army of messengers and a large number of highly-trained men contribute to their publication. The brokers keep the slips in pads, thus having at all times a complete record of the day. The whole

world is covered by the slips and every item of general news is given, but especial attention is paid to railroad earnings, crop reports, declarations of dividends, and other matters bearing directly upon the market. Whatever event affects tape values materially is financial news.

Examples of Wall Street News Slip

Two specimens of the Dow, Jones & Co. slips are given on pages 193 and 194 in order that the reader may see for himself an example of the tabloid journalism upon which Wall Street depends. It may be said that no other journalism in the world is so rapid, accurate and efficient as that of Wall Street. Even the news slips—speedy and admirable as they are—are not quite quick enough for all the Street's purposes. It wants the news flashed to the offices, even if in a form that is a mere hint, conveying three or four words like a headline in a newspaper.

DOW, JONES & CO.

THE WALL STREET JOURNAL — NEWS BULLETINS

ELECTRIC PAGE NEWS TICKER

44 BROAD ST., NEW YORK. — Telephone One Broad.

Tuesday, May 25, 1920. — No. 75.

COFFEE MARKET

Coffee futures opened quiet and steady, first prices ranging 9 to 13 points below the previous close. July options were again under pressure from Wall Street, opening 13 points lower at 15.17. Trading in the further months was practically all consummated among trade houses. Weather chart was again unfavorable this morning, showing "fine weather" in all five districts, but at temperatures ranging from 30 1/5 to 39 1/5 Fahrenheit. On the Centigrade thermometer, Avare stood 1 degree below zero. Immediate cables from Brazil were considered satisfactory, quoting Rio spots 275 reis higher. Exchange rate on London, however, was 3-32d. lower at 16⅝d., in addition to a drop of 125 to 275 reis in Santos futures.

ACTIVE STOCKS

Active stocks show from 10 a. m. to 12 noon, compared with yesterday's close:

Sales	Stocks	Open	High	Low	Last	Up	Off
13800	Baldwin....	109½	111¼	108¾	110⅞	1⅝	..
6700	Crucible....	120½	122	118½	121	¾	..
24600	Pan-Am Pet	98	100⅝	98	100⅛	2	..
13600	Sinclair....	29¼	30	29⅛	29⅝	...	..
8400	Studebaker.	61	62⅞	60⅞	62⅝	2	..
24400	U S Steel...	90¾	91⅝	90¾	91½	1	..

STOCK EXCHANGE SALES

Stocks—	Today	Monday	Saturday	Friday
11 to 12	170,500	211,200	194,700	223,800
10 to 12	341,900	406,700	345,100	391,000
MISCELLANEOUS BONDS				
11 to 12	$611,000	$621,000	$538,000	$439,000
10 to 12	$1,832,000	$1,085,000	$1,286,000	$1,117,000
LIBERTY BONDS				
11 to 12	$344,000	$2,368,000	$4,428,000	$4,872,000
10 to 12	$7,606,000	$5,310,000	$8,044,000	$10,206,000
TOTAL ALL BONDS				
11 to 12	$4,055,000	$2,989,000	$4,966,000	$5,311,000
10 to 12	$9,438,000	$6,395,000	$9,330,000	$11,323,000

Chicago—May corn 187, up 3½; July corn 162⅞, up 1½; September corn 152¾, up 1⅜; May oats 100½, up 1; July oats 89, up 1¼; September oats 75⅛, up ⅝; July pork 34.52, up 2; May lard 20.55, up 23; July lard 21.22, up 5.

No. 75.

DOW, JONES & CO.

THE WALL STREET JOURNAL NEWS BULLETINS

ELECTRIC PAGE NEWS TICKER

44 BROAD ST., NEW YORK. Telephone One Broad.

Tuesday, May 25, 1920. No. 77.

INDICTMENT AGAINST C. W. MORSE DISMISSED

Judge A. N. Hand, in the United States District Court, has dismissed the indictment found on May 3 against Charles W. Morse for violation of the Trading with the Enemy Act in having sold the ship *John G. McCullough*, which was valued at about $500,000, to the Tunisian Government during the war, without the permission of the United States Shipping Board and Emergency Fleet Corp. With

Morse there were indicted Capt. W. S. Mitchell and the United States Steamship Co. and the J. G. McCullough Co. Judge Hand took this action on motion by United States Attorney Francis G. Caffey, who stated simply that after a further review of the evidence the Department was satisfied that it would be impossible to secure a conviction. Subsequent to its alleged sale the ship was sunk by a German submarine.

THOMAS F. RYAN NOT ILL

Rumors which were in circulation in Wall Street this morning that Thomas F. Ryan was seriously indisposed, are untrue. At Mr. Ryan's home it was stated that he had left his residence at the usual hour this morning for his office and that he was in perfect health.

REGULAR SLOSS-SHEFFIELD PFD. DIVIDEND

Sloss-Sheffield Steel & Iron Co. has declared the regular quarterly dividend of 1¾% on its preferred stock, payable July 1 to stock of record June 19.

AMERICAN BEET SUGAR CO.

At the annual meeting of the American Beet Sugar Co. directors were reëlected.

U. S. REALTY & IMPROVEMENT

At the annual meeting of stockholders of U. S. Realty & Improvement Co. directors were reëlected.

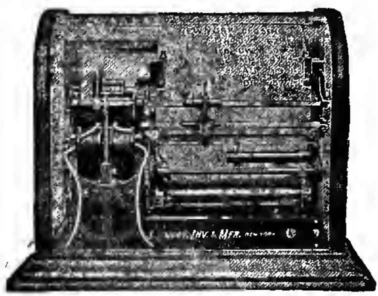
12:20—July cotton 37.45, up 40; August 36.00, off 25; September 34.80, up 5; October 34.70, up 55; November 33.50, unchanged; December 33.70, up 58; January 32.80, up 42; March 32.35, up 35.

12:20—Market quiet: Baldwin 110¾, up 1½; Sinclair 29⅝; U. S. Steel 91⅝, up 1⅛; Texas Co. 46, up 1; Studebaker 62¼, up 1⅝.

No. 77. DOW, JONES & CO. *Time 12:25.*

To meet this demand both news agencies, besides distributing printed slips, telegraph the news to subscribers, using marvelous little instruments which print their information on little sheets in the brokers' own offices. A picture of one of these page printers—that of the New York News Bureau—and a reproduction of a section of its product, will give the reader an idea of this mechanism (page 196).

News Tickers.—All that is necessary to convey intelligence of importance to the banker or broker is a two-wire connection from the news bureau to a compact machine in his office, taking up a space of less than a square foot, and in most cases standing on a slender pedestal of height adjusted to the convenience of those in whose office it may be placed. A roll of paper, 5½ inches wide, and a single wheel carrying type of the alphabet and numerals, are the only features about it that may be considered as attracting attention outside of the news matter that is transmitted.



PAGE PRINTER

The distance over which these instruments may be operated has as yet not been definitely ascertained, but in actual use the service from a central point close to the Battery extends as far as Yonkers, as well as across the East River far into Long Island. The page printer is in some respects an evolution from the Stock Exchange ticker, but with the printing wheel placed on a bar, along which it is forced by an auxiliary carrying bar. The instrument with its glass cover occupies a space only eight inches high by ten inches wide, and requires no outside assistance other than that of the keyboard operator. For all practical purposes, so far as the receiver is concerned, the page printer is automatic.

THE STOCK MKT

AFTER CONTINUED HEAVINESS THE MKT TURNED AB-
RUPTLY MANY OF THE LEADING ISSUES BECOMING
STRONG AND MAKING SHARP ADVANCES. UN.PAC ROSE
ABOUT 2 PTS FROM ITS LOWEST AND A SUBSTANTIAL
RISE ALSO OCCURRED IN READING.STEEL COMM.AND
AME SMELTING. PRACTICALLY EVERYTHING ON THE
LIST SHARED IN THIS IMPROVEMENT.WHICH CARRIED
PRICES AT THE CLOSE ABOVE YESTDYS CLOSE. UN.PAC
SHOWED A NET GAIN OF ABOUT 1 PT.AND SUBSTANTIAL
NET GAINS WERE SHOWN IN READING.STEEL COMMON
AND AMAL.

GOVTS UNCHGD. OTHER BONDS IRREGULAR.

MONEY ON CALL -

OPEN 3. HIGH 3 3-4. LOW 3. LAST 3 3-4. CLOSED
3 1-2 A 3-4. RULING RATE 3 PC.

LOANING RATES ON STOCKS

STEEL 3 1-4. OTHERS 2 1-2 AND 3. FAIR DEMAND.

How News is Printed on a Page Printer

Market Reports.—The first regular daily stock market report appeared in London in 1825, and the New York papers were quick to copy after their London contemporaries. It has only been within a generation, however, that the market report has become almost a science requiring mastery not only of the current influences affecting speculation, but also of the fundamental economic principles underlying business.

STOCK TICKER SHOWING TAPE (See page 186)

The market report performs this special service for the banker, the broker, and the operator. It saves him much of the trouble and time of analyzing reports and statements, and of interpreting movements. This is the special function of trade journalism. The business man would require a large reference library and several clerks to obtain for himself the information which is now furnished for him by the experts who write the leading market reports. To William Dodsworth the Street owes no small debt for elevating the standard of financial journalism.

It was recently computed by the New York *Times* that

the commercial and financial articles and market reports published every year in the daily, weekly and monthly publications of this country would make nearly two hundred and seventy-one million books of the size of the ordinary novel.

More than one-fifth of everything published relates to business.

As long ago as 1692 J. Houghton published in London a weekly review of the commercial operations of that time, and it was from this, one of the earliest of financial publications, that Macaulay, many years later, obtained the materials for his account of the stock speculations near the end of that century.

REFERENCES

Instructive collateral reading may be found in the biographies of inventors such as Morse, Bell, Edison, Marconi and others; and of such pioneers as Field, Wells, Cornell and others in the telegraphic field.

CHAPTER XIII

CURB MARKET AND CONSOLIDATED EXCHANGE

There seems to be a strange affinity between stockbrokers and curbstones. For nearly a century the stock market of London was on the sidewalks and in the coffee-houses of 'Change Alley. The speculations in Rue la Quincampoix, Paris, in John Law's day, were curb operations. Even the business of the great Bourse, with its yearly turnover of 130,000,000,000 francs in value, is now probably exceeded by the Coulisse, the curb market of Paris. It seems that outdoor trading in the world's financial centers arises automatically wherever buyers and sellers of stocks and bonds not otherwise provided for persistently seek a market. Localization is a matter of proximity to the more highly standardized trading. These outdoor exchanges are as a rule operated on less responsible lines, are of looser organization and less critical of the quality or quantity of participating membership. Gradually, however, as in the case of the New York Curb, an association was formed, a directory of members issued, and a constitution and a manual of accredited procedure adopted. Thus what to the casual visitor seems like a street mêlée is really a highly organized though freer way of doing business in the open.

Born on the Street.—The New York Stock Market was born on the street. The first dealings in securities were under the buttonwood tree which stood in front of 68 Wall Street; and ever since, even when the Exchange was closed by war (Aug.-Dec., 1914), some part of the stock

market has always been located on the sidewalks and curbs. Later, brokers located themselves on Wall Street near Hanover. During the Civil War the curb market was in William Street, between Exchange Place and Beaver, and while no record of transactions was kept, it was believed that the trading in the street was heavier than that in the Exchange. It began at eight o'clock in the morning and continued until 6 P. M., or even later, and at night-time the market was transferred to the corridors of the Fifth Avenue Hotel. William Street at that time was almost continually impassable by reason of the crowd of brokers.

The Curb in Action.—The curb market now meets in Broad Street, between the Broad Exchange Building and The Wall Street Journal Building; but has bought land for a new home and office structure of its own on Trinity Place, between Rector and Thames streets.

In 1899 the curb market assumed extraordinary proportions, resembling the activity of the old war times. In 1901 the market became less active, but still quotations were established for two hundred and sixty-three different stocks and bonds. The banner year, however, was in 1906, when many new flotations occurred. Prices for bonds and stocks reached the highest levels of years. For example, United Copper, which in 1911 was quoted at about $2 a share, sold in 1906 as high as $77 a share. The culmination of this period was the panic of 1907.

Curb's First Commandment.—Securities listed and admitted to trading on the New York Stock Exchange may not be traded in nor quoted on the Curb; but many of the Stock Exchange houses have regular representatives in the curb market. There are many important issues dealt in on the Curb, however, as a number of large companies have not applied for the listing of their securities on the

Stock Exchange.[1] The curb market thus makes prices for stocks between the time of their issue and of their listing. Many stocks and bonds are even traded in before they are issued. This was the case with the United States Steel stocks and later with issues of the City and Government bonds. This is done on a basis of "when-as-and-if-issued." New issues are constantly making their début on the curb.

Organization.—After some years of effort, in 1910 the late E. S. Mendels, Jr., for almost forty years the "dean" of the curb market, succeeded in forming the New York Curb Association, and this organization has proved a success from the start. It is governed by a Board of Representatives of 15 members and requires transfer and registrar offices. There are about 550 members who pay an initiation fee of $250. Memberships are now transferable, and since the purchase of a building site valued at $1,000,000 the prevailing price for membership has risen to $5,000, on which the latest sale at $7,000 showed a substantial premium.

Dealings by outsiders are not restricted. The Manual and Constitution regulate the contract relations of members.

The curb market is one of the most interesting features of Wall Street. Every business day, visitors from all over the world stop to watch the antics of the traders. They see a unique pantomime—scores of traders signaling to nearby offices with their fingers, very much in the same manner that deaf and dumb persons "talk" to one another.

Public criticisms of the curb by the Hughes Commission were rather severe, because of the alleged irresponsible

[1] Prior to 1920, the Standard Oil issues were never quoted on the Exchange lists, owing to the company's unwillingness to comply with the listing requirements for complete publicity as to financial conditions, etc. Consequently they figured largely, as unlisted "Standards" do now, in Curb operations.

relations of the members of the Stock Exchange, through the offices of whose members 85 per cent. of curb business was said to have passed, and some of whose members were said to have been identified with "some of the most flagrant cases of discreditable enterprises." Meanwhile, many if not all of these abuses have been abated, if not removed.

The Consolidated Stock Exchange.—As a secondary market the Consolidated arose out of the merging of four or more exchanges in 1886, the leader in which—the New York Mining Exchange—began business on November 1, 1875. About 1885 the decision to trade in odd lot shares of railroad issues caused a secession of 400 members and broke relations permanently with the New York Stock Exchange.

Meanwhile the odd lot business has at times assumed larger proportions than both exchanges could comfortably handle. Such was the case in the great trading seasons of 1901, 1907, 1909 and during much of 1915 and 1916. Of this particular service a charter member of the Consolidated has said:

> In raising the standard of what may be described as the retail odd lot trade, as distinguished from the jobbing trade in odd lots in the primary market, we have performed a public service. We have made it legitimate trade and brought it to two markets, where it naturally and logically influences prices. There always must be an outlet for this trade, and for its decent development we are responsible.[3]

After occupying several locations in its first 30 years, the Consolidated was domiciled permanently in its own home at the southeast corner of Broad and Beaver, within a block of the Stock, Cotton, Produce and Coffee Ex-

[3] "The Consolidated Stock Exchange of New York," S. A. Nelson, 1907.

changes. Its building is easily recognized by its Ionic columns and vast dome through which a central skylight ordinarily diffuses ample light to transact business on the spacious trading floor below.

CHAPTER XIV

THE INVESTMENT MARKET

That country is most prosperous, in the long run, and that people most happy, and that government the most secure against war and revolution, in which the great majority of its citizens save something out of their incomes for wise investment. Investment means provision for the future. It is insurance against sudden calamities. It is the safeguarding of wife and children. It is the reservoiring of capital for further national advance.

Task of Investment.—It was said by John Jacob Astor that he could hire plenty of men competent to collect the money due him from rents and other sources of income, but that it took all his own time to see that his surplus income was well invested. The safe investment of money, by which is meant the purchase of securities or real estate for permanent holding, as a source of yearly revenue, requires time, close study, and sound judgment. Mr. Astor thought that he could depend only upon himself to do this work. That so many mistakes are made in investing money may be said, however, to be due either to too much dependence upon oneself or too much dependence upon others. A golden mean is best. Not every one can be an Astor.

As the country grows richer and has a larger surplus every year over and above the expenditures for living expenses, the more difficult becomes the task of investment, because the supply of safe investments may not

keep pace with the expansion of surplus wealth. Then it is that investors take large risks buying securities of the second or third class. There soon comes a point where investment itself becomes a mere speculation, when the purchase of doubtful securities outright becomes more perilous than would the buying of high-class dividend-paying stocks on margin.

Private capitalists, estates, insurance companies, and other corporations are constantly in the market seeking investments, and while, as compared with the speculative dealings, the investment business seems small, it is in reality very large and is constantly expanding. There exists in Wall Street elaborate machinery for investments. There are the great banking-houses which are constantly bringing out the new securities issued by the railroads and other corporations. There are banking-houses which make a specialty of the United States bonds. These or other firms also bid for new issues of State, county, and city bonds, which, if they secure the awards, they later sell over their counters to investors. Many brokers in and out of the Exchange confine themselves exclusively to investment securities; they take no margin accounts whatever. There are bankers and brokers who make a specialty of different classes of investment, as for instance government bonds (Federal, State, county and city); railroad bonds, equipment bonds, street railway bonds, other public service bonds (gas, water and power); and real estate bonds. Bond houses are both buyers and sellers of investment securities, and they act as advisers for and agents of investors as well as fiscal agents for corporations. There exists in the Street, therefore, every facility for the sale or purchase of high class securities. In recent years the big banks have established bond departments, and these are constantly expanding their activities and sales.

Here also comes every doubtful new scheme and enterprise seeking money for its promotion and offering stocks and bonds galore to investors. The promoter flourishes in the Street in every form, and the investor must learn to distinguish between the reputable investment firm and the irresponsible seeker after other people's money. There are so many high class houses that no one ought to be deceived.

Standard investment securities are subject to fewer fluctuations in prices than speculative stocks, and they are less liable to manipulation and temporary influence. Permanent elements of value govern their price.

Conditions of the Problem.—The Wall Street man studies an investment from five standpoints:

1. Its yield in interest or dividend, for the object of investment is income.

2. Its security, for the safeguarding of the principal is the first consideration in the placing of money in an income producing bond.

3. Its duration, for the investor naturally prefers a security having a long time to run before maturity.

4. Its marketability, for the investor prefers that security which can most easily be sold if he needs cash or which banks would accept as collateral for a loan.

5. Its taxation. Investors prefer tax-free bonds, or bonds subject to slight taxation. Under a 1911 law, all "secured debts" could be made exempt from personal taxation in New York State by paying a registration fee of $5 per $1000 bond. Federal income tax acts of 1914-1918 caused many investors to shift from taxable to tax-free (government) bonds thus depressing taxable bond prices. The merchant marine act of 1920 relieved shipping securities.

A bond to command the highest price must pay a fair rate of interest, be of undoubted security, and have a

long period to run. It may pay 6 per cent. a year and yet be of doubtful safety or of inferior standing, like a third mortgage or income bond. Or it may pay 6 per cent. as a first mortgage on a property of known value, due in two or three years. In either of these cases a 4- or 4½-per cent. long-term bond of undoubted security, would command a higher price. Interest rates vary with conditions.

Rate of Interest.—After our Civil War even a high-class security had to pay as much as 7 per cent. In 1865 the Government paid over 7 per cent. interest on $671,000,000 of its debt, 6 per cent. on $1,213,000,000, 5 per cent. on $245,000,000, and 4 per cent. on only $90,000,000. In 1911 one-half of outstanding bonds paid only 2 per cent. interest; whereas, in 1920, over 53 per cent. of the net public debt of $25,152,260,013 bore interest rates ranging from 3½ to 4¾ per cent. The yield at the latter rate was about 6.60, at the low price of 94.70 for Liberty Bonds. On short-term certificates the Government paid 6 per cent.

It is a rule that the less secure an investment the higher its rate of interest. If an absolutely safe investment pays a high rate of interest or dividend, it commands a premium which reduces the actual return on the investment to a level with the prevailing rates for securities of that class. An excessive debt impairs security.

The premium is the price paid for a security over and above its par value. Thus, a United States 4-per cent. bond due 1925, selling at 140, pays 4 per cent. on its par value of 100; at 140 it would yield to its holder 2.86 per cent. The calculation of bond values is facilitated by the use of tables prepared by actuaries.

The bond houses estimate a security by its safety, its interest, its duration, its taxation, and its probable market price. These houses are prominent as bidders for

State and city bonds. In 1920 there were in the United States approximately 1,000 bond houses, banks and other institutions distributing securities to the public. These agencies influence public buying in probably 95 per cent. of all new issues.

Although 7 per cent. was the standard rate of interest on a safe investment long after the Civil War, 3½ to 4 per cent. a generation later was more nearly the earning power of money when invested in a gilt edged security. It was then held that the higher the rate above 4 per cent. the less the security of the principal becomes. Meanwhile the greater cost of capital and competition for credit make for a higher level of interest rates even on the best security.

Different Classes of Investments.—Investments may be divided into the following general classes:

1. The woman's investment, in which absolute security is the first consideration.

2. The savings bank, the insurance company and the trustee's or executor's investment, in which the security purchased must be of a "gilt-edged" description, that is, possessing a high degree of security and meeting every requirement of a first class investment.

3. The business man's investment, which may possess a considerable speculative quality, requiring such attention upon the part of an investor as a keen business man is able to give to his daily affairs, but which affords a larger return upon the money and the possibility of an advance in price.

4. The speculative investment, in which both the risk and the possible return are greater, and which is bought not primarily for present income but more for future profit.

Some bond houses make a specialty of one or the other of these classes of securities, but many deal in all.

Selling Bonds.—In a sense Wall Street is a manufactory of securities; and like other manufacturers it employs every means for finding a market for its products. Many of the bond houses employ expert salesmen who go out on the road, and personally interview bank officials and individual investors, explain the merits of the security they offer and seek to secure orders. This process does not materially differ from that of the "drummer" of a dry goods jobbing firm. Bond houses also send out letters and circulars by the thousand to selected lists of investors, and these letters and circulars are often very ably written.

Intelligent advertising of investment securities has in recent years grown to enormous proportions. The placing on the market of a big new issue of securities is often preceded or accompanied by an elaborate and costly educational campaign by the medium of advertising; while the ordinary daily business of marketing bonds is similarly facilitated. Firms of expert advertising men aid in the intelligent placing of these advertisements, while some investment houses have a special advertising adviser of their own. The scientific employment of publicity methods has become almost a fine art. The best advertising in the long run is that which tells, in an attractive way, the exact truth and which will use no newspaper or magazine that accepts dubious, or tipsters' "ads." Many of the magazines of large circulation have established investment departments employing able financial writers to answer subscribers' inquiries in regard to securities; and in this and other ways the public is gradually obtaining an investment education.

Information Service.—Many of the bond houses have statistical departments containing the very latest information in regard to every development in the railroad, industrial, mercantile and political world, and the statistical

departments are not only an aid to the houses in selling securities but also materially assist their customers in arriving at a sound judgment as to values.

The large investor makes an intelligent distribution of his investments, not tying up all his surplus in one security or in one locality or even in one country. Investment has now become an international business. The capitalists of England and France have literally thousands of millions of dollars invested outside of their own countries; and even in the United States, notwithstanding our own vast territory, the resources of which are not yet fully developed, we are now exporting considerable capital. The big bond merchant, therefore, must in his touch upon world affairs become a good deal of a statesman as well as a financier. The wise distribution of risks is a science.

There are large daily sales of bonds in the Stock Exchange; and it is therefore a distinct advantage to be listed, for marketability as well as negotiability as security for loans is thereby increased. But the sales of bonds "over the counter," as the phrase is, are even larger.

The Street's Salesmanship.—Securities are industrial and financial leadership's confidence in future enterprises. It is Wall Street's business to "sell" that confidence to the investing and speculative public. With the enlarging scope of the corporate financing to be done this field of service calls for the best types of American salesmanship.

Stock and bond selling and buying have developed a system or systems of salesmanship of their own. Bond houses are more than ever on the lookout for bright, energetic men and women for their selling forces. These men develop a territory or a special clientele, much after the manner of the life insurance agencies. Different houses specialize in municipals, public utilities, or industrial bonds, as the case may be. When they underwrite or purchase outright a large issue extensive preparation of

their selling plans and training of their selling force are made in advance of the offering. One of the well known houses, which had agreed to float a large timber bond issue, for example, first took its force of fifty or more salesmen into the timber country, where the actual resources might be studied on the spot, had talks on timber bond values and problems on the way out, and applied the principles to the selling of this particular issue on the way back, covering a full week in a Pullman train.

Stock Exchange and other stock-trading firms have various ways of developing a market. Each firm has its own patrons, as a rule, who are the business friends of some one or other of the firm's staff. To have a personal clientele of one's speculative or investment friends is an asset of much value in locating one's self with this or that firm. Advertisements appear frequently calling for such persons when a house desires to enlarge its customers in any particular direction. The specialist in some particular field is in demand when there is an active market in this or that line, as tobaccos, oils, municipals, unlisted securities, etc.

For those who desire to become acquainted with the methods and principles of selling and buying there is no better way than to take the circulars of different houses as offerings are announced, examine them from the several viewpoints of assets, liabilities, working capital, net earnings, margin of safety after operating costs and fixed charges are deducted, to find how much is left over as net surplus for prorating among the shares including those proposed to be sold. For a more specific examination of any given proposal, there are usually excellent text-books or special treatises available, such as are referred to in the Reference Lists at the end of each chapter in this volume. Some of the more carefully written house organs may be read with profit, and the financial journals always

have special articles of timely value to the investing and trading public.

REFERENCES

''A Plain Guide to Investment and Finance,'' T. E. Young, 1908.
''Stock Exchange Securities,'' Sir Robert Giffen, 1877.
''Stock Exchange Investments,'' 1900.
''Specimens of Investment Securities for Class-room Use,'' Wm. G. Sumner, 1901.
''American Railways as Investments,'' Carl Snyder.
''Art of Wall Street Investing,'' John Moody, 1906.
''Investment Bonds,'' F. Lownhaupt, 1908.
''Bonds as Investment Securities,'' *Annals of American Academy*, 1907, also 1920.
''Investments: What and When to Buy,'' R. W. Babson, 1908.
''Art of Investing,'' 1888.
''Anatomy of a Railroad Report,'' Thomas F. Woodlock, 1900.

CHAPTER XV

THE BROKER AND HIS OFFICE

The broker is the connecting link between buyers and sellers. He is a middleman, one who negotiates sales or contracts as an agent. The word broker is old. The early English form was "broceur." By some it is believed to be derived from the Saxon word "broc," which meant misfortune; and the first brokers indeed appear to have been men who had failed in business as principals and been compelled to pick up a precarious living as agents. There are almost as many different kinds of brokers as there are lines of business. In Wall Street alone there are stock-brokers, investment-brokers, curb-brokers, two-dollar brokers, grain-brokers, cotton-brokers, coffee-brokers, ship-brokers, insurance-brokers, money-brokers, foreign-exchange-brokers, bond-brokers; and there are large houses which combine nearly all these different kinds of brokerage.

The stock-broker is usually a man possessed with a superior endowment of brains. No fool can last long in the Stock Exchange. The broker, whether he is the office partner or the Board member, requires alertness, a habit of quick decision, accuracy, promptness, the ability to take large risks with good judgment and to read character readily, and a capacity for keeping cool in times of excitement. He must never lose his head, as the saying is.

Breadth and Narrowness.—The broker is narrow in the sense that he looks at everything through Wall Street spectacles. A thing is good or bad, wise or foolish, just as it happens to affect the immediate interest of the Street.

If, for instance, the market is depending upon a United States Supreme Court decision, the broker cannot see why the decision is delayed. If there is a strike in the coal fields, he can not see why the operators and miners should be so inconsiderate as to disturb the prices of stocks. He is slow to see any consideration other than that of his own interest. Still, that is a trait of human nature by no means confined to Wall Street. But the broker is broad in another sense. The Wall Street horizon is almost as wide as the world itself.

"The operators in the gold room," wrote Horace White in his account of the gold speculation of the war time, "should be at the same time the best informed and the most intelligent business men in the country. They must have not only the best and latest information, but they must be able to determine at once what is the economic meaning and significance of any given fact which may come to their knowledge. They must be able to resolve the most complicated problems in mental arithmetic without a moment's hesitation. If the Secretary of the Treasury has decided upon a certain measure of financial policy, or the President upon a certain measure of foreign policy; if there is a short corn crop, or a Fenian rebellion, a war-cloud in Europe, or a heavy immigration, or a great oil discovery, or a change in the tariff, or anything else which can affect the currency or the public credit, they must be able to melt down the mass and weigh the product in terms of standard gold. This is the work of omniscience. No man can do it."

A Man of Vision.—Yet this picture of the gold-broker of a generation ago serves well to describe the work of the stock-broker of to-day. He must keep in touch with every market abroad as well as at home. He must know something of the significance of parliamentary debates and congressional legislation. He studies bank statements, rail-

road reports, crop estimates, statistics of foreign trade, and the forces at work in domestic and international politics. As he must give advice which may make or lose money for his customers, he is obliged to keep an intelligent watch on everything of importance that is going on. As he is not omniscient, he often makes mistakes. But his grasp on the world's affairs is firmer than that of most other observers.

The broker is usually a gentleman and dresses well and lives well. Sometimes he is something more than a broker, and becomes a power outside of his own class. Brayton Ives, a former President of the Exchange, became a noted collector of books. Another President, A. S. Hatch, was a well-known worker in church missions. Still another President, J. Edward Simmons, was President of the Board of Education and later of the Chamber of Commerce. Another President, James D. Smith, was Commodore of the New York Yacht Club. S. V. White, besides being a broker, was a member of the bar of the Supreme Court, and served in Congress. Stedman was a poet. R. P. Flower was Governor of the State. Bird S. Coler served as Comptroller of the city. On the whole, brokers as a class compare well, mentally and morally, with other business men. They are always patriotic, if for no other motive than that of self-interest, for if the Government went down or suffered from domestic revolt or foreign invasion, the whole structure of Wall Street credits and values would collapse like a house of cards. During the Civil War the Exchange would not admit as member any one suspected of aiding in the rebellion. The broker is proverbially generous. When he makes money fast, he spends it freely, and his contributions to charity are liberal.

Relations to Customers.—As regards their relations to customers, brokers may be divided into two classes: first, those who do a strictly commission business and who are conservative in advice and dealings; and second, those

who speculate on their own account as well as for their customers, who advise the taking of long chances, and who too often are bulls at top prices and bears at the bottom. It is needless to say that a wise choice of a broker is the first duty of one who is entering into the stock market.

It is equally true that the broker should make a wise choice of a customer; for the connection between brokers and customers is as delicate as that between attorneys and clients. Indeed, some brokers use the word clients in speaking of their customers. If the customer is mean and unscrupulous, he can make much trouble and loss for his broker. It is by no means uncommon for a customer to abandon his broker in time of panic to bear the loss which is properly his own. Strictly speaking, the broker is simply the agent for his customer. The latter is the owner of every share of stock bought for him by the broker, although the broker is the actual holder of the stock. He holds it as security for the loan which he makes to the customer upon it. On every $10,000 purchase the customer puts up $1,000 cash. The broker advances the remaining $9,000 and charges the customer interest, holding the stock as security for the loan. The customer's right in the stock, it has been legally determined, is "the right of redemption." He is entitled to receive the stock bought the moment he pays the balance due upon it. Moreover, he is entitled to all the dividends upon the stock accruing after the purchase, although the stock is in the possession of the broker, who may hold the same on the books of the company in his own name. The broker has the right to demand more margin from his customer, and if this margin is not forthcoming, after due oral or written notice, the broker can sell the stock for the account of the customer. What is "due notice" may depend upon circumstances.

Rehypothecation.—The necessities of the stock market require the broker to do some things which, in a strict

construction of law, it might be difficult to uphold in the courts. For instance, when the broker pledges the stock he holds for his customer as security for a loan at a bank, that is rehypothecation. Moreover, it is a general principle of law that an agent employed to do a certain thing can not employ another agent to do it for him. Yet it is a common and recognized practice for brokers to employ other brokers. The man who opens an account with a broker tacitly agrees, however, to conform to the customs of the stock market. He is willing to take advantage of the mechanism the Street has created for the transaction of its business, and must therefore not raise technical objections to its methods. Some brokers have an agreement with their customers that "accounts will be carried on margin according to the rules of the New York Stock Exchange and its members, with authority to loan or pledge the securities carried in bulk or otherwise for such sums as we may see fit."

Eliot Norton, of the New York bar, in a treatise on stock-trading from the legal standpoint, says that when a customer gives an order to a broker it is a proposition to make the broker his agent to contract to buy or to sell, according to the rules and customs of the Stock Exchange, such securities as are specified in the order.

The Big Commission Houses.—Let us now step into a broker's office and see what it looks like, and perhaps open an account. There are brokers who have only one customer or two, although the business of these two may be large enough to occupy his entire energies. There was a time not so many years ago when a customer who carried a line of thirty thousand shares would be the talk of the Street, but in recent years operations have expanded, and a line of one hundred thousand, and even one hundred and fifty thousand shares a day, has been not uncommon. There are brokers with small offices and only two or three

clerks, and others who hire only desk room and clear their business through other members; but the office into which the reader is conducted is one of the larger commission houses, that carry several hundreds of accounts, and lease private telegraph wires connecting with branch offices uptown and in other cities. These houses transact a general banking as well as brokerage business. They receive deposits of money, and make loans as well as buy and sell securities. They have two or three Board members, and in addition often employ other brokers. They may have representatives on the Cotton, Produce, and Coffee Exchanges, and buy and sell wheat, corn, cotton, and coffee on margins and for commissions the same as they do stocks. They employ a large staff of clerks, and their annual expenses range from $60,000 to $150,000 and even more.

As we enter the extensive offices of one of these large houses we are confronted with an arrangement of glass or wood partitions and windows, very much like a bank. Here are windows marked "Cashier," "Deliveries," "Comparisons," "Telegrams," and the like, and, looking through or over the partitions, we see bookkeepers and clerks at work. The main principles of bookkeeping are the same in any business, but a broker's office requires a line of books and blanks peculiar to its special needs.

Here at one side is a door marked "Customers," and through this we enter a large apartment resembling the library of a private residence more than a business office. The floor is carpeted. On the walls hang oil-paintings or interesting engravings and etchings. There are upholstered chairs and couches. There are costly Oriental rugs. There are desks with writing material, tables on which are found news slips and the latest financial journals, a rack containing files of the *Journal of Commerce* and other daily newspapers, a bookcase holding bound

volumes of the *Financial Chronicle,* Moody's or Poor's *Manual* for a series of years, and other books of reference. On one side are private offices of members of the firm. On the other, reaching across the wall, is a board containing movable blocks of figures with which boys are posting the quotations of stocks, grain, and cotton as fast as they come out over the tickers. Groups of customers sit in the chairs, their eyes intent on the board, where they are able to see at a glance the ever-changing position of the great market. It is like looking through a huge kaleidoscope, such is the constant movement of prices. Not all the large offices have this arrangement of quotation boards, but most of them do. The tickers, of course, are indispensable adjuncts of every office, if not of every room therein.

As we enter this place we are conscious at once of a strange environment. If we have never before been in the speculative arena, it is as if we had suddenly entered into a new country. Here is a babel of sounds; we hear, but understand not. The language seems to be English, but we might as well be listening to Chinese. It will be some time before we thoroughly comprehend the argot of the broker's office.

We will suppose that we have entered this office not merely from curiosity. We have heard the stories of marvelous gains achieved in the stock market, and we are moved to make an investment. So we ask to see a member of the firm. The office partner greets us. The typical broker is courteous in his manner, but quick and terse in his language, sharp in the glance with which he comprehends us, and giving the impression of intense nervous force. We tell him that we wish to open an account, and ask his terms and advice.

Introduction.—Now, no one can make a deposit at a bank without a reference, and no one can open an account

with a broker without an introduction, or some description of oneself that will take the place of a personal introduction. Name, address, and business must be made known. The broker must be satisfied as to the customer's standing before he will accept his business. In this case we say that we keep a deposit at such and such a bank, and refer to its President or Cashier. No better reference could be given. The broker may now acquaint us with the rule of the Exchange governing commissions, and the custom of the Street as to margins and hypothecations of securities. He takes our signature and we make a deposit varying with the size of the order we intend to give and the kind of security we purpose to deal in. Having complied with the terms of the broker, we are fairly launched on the sea of speculation, or, as one Wall Street man naïvely says, "fairly engaged in the business of losing money."

Brokers' Advice.—Most men enter Wall Street with a predetermined idea of what they want to do. They have some tip or information in regard to some particular stock or some theory as to the movement of prices. In fact, many outsiders disregard their brokers' advice altogether, and generally suffer by so doing. But let it be understood that we are a "lamb" or a novice, in ignorance of the market, and that we place ourselves unreservedly in the broker's hands. We ask him to take our money and invest it for us. He flatly refuses. "We take no discretionary orders," he says. A discretionary order is one in which the broker is given authority to buy or sell whatever stock he pleases at any price, the customer relying on his honor and judgment to yield him a profit. Discretionary orders and pools are common enough in Wall Street, but few Stock Exchange houses will have anything to do with them. Disappointed in this, we now ask for advice.

No two brokers adopt exactly the same policy in regard

to advising customers. Some are very conservative about doing so. Others give advice freely. In this case the broker says something like this: "The Air Line stock looks cheap; it has paid 5 per cent. now for two years, and its statements of earnings show steady gains from week to week. Its capitalization is less per mile than that of the Straight Western Line, which earns no more and yet is selling twenty points higher. It is beginning to advance on what seems to be good buying. I am advising my customers to buy."

The Order.—We are immediately consumed with an intense eagerness to buy Air Line, and although we have no idea where the Air Line is, we say that we will take two hundred shares. The broker then directs us to fill out an order blank as follows:

NEW YORK, *March 1.*

RICHARD ROE & COMPANY, Bankers:

Buy for my account and risk 200 Air Line at 103.

JOHN DOE.

This order is immediately telephoned to the Exchange, where the Board member proceeds to execute it. In the meantime we take our seat among the other customers, and finding Air Line on the quotation board, anxiously watch the movement of its price.

As soon as the broker has bought the stock he serves us with a notice like this:

NEW YORK, *March 1.*

JOHN DOE, Esq.,

SIR: We have bought for your account and risk 200 Air Line at 103.

RICHARD ROE & COMPANY.

The name of the broker from whom the stock is purchased is also generally given.

In three or four days, it may be, we are delighted to see the stock quoted at 108, when the broker calls us to

him and suggests the propriety of our taking the present profit and selling. "Money is getting tighter," he says; "the bank statement to-morrow is likely to be bad. The market looks top-heavy. Your stock is comparatively low, but it will be affected by the general decline. I advise a sale." So we write another order to sell the two hundred shares at market price, and presently are informed that they have been sold at 107½. It may be said here that in giving orders to buy or sell, if no price is named, it is always understood to be at "the market."

Statement of Account.—We now ask for a statement of our account, and find that the transaction stands like this: two hundred shares at 103 cost $20,600. The broker obliged us to deposit 10 per cent. margin, or $2,060. Then in four days we sell at 107½, or $21,500. Our profit is $900 on an investment of $2,060, or nearly 44 per cent. But from this the broker will deduct his commission of $25 on the purchase and $25 on the sale, and will charge us the prevailing rate of interest on $20,600 for the four days he carries the two hundred shares for us, allowing us, however, interest on the amount of our deposit of $2,060.

Frequently an operator, in order to limit the amount of possible loss, will, in giving an order to buy, say at 110, specify that in case the price drops, say to 106, the broker shall sell without further delay. This is what is called a "stop order." Bear operators sometimes raid the market—that is, sell it freely—in order to depress prices to a point where stop orders will be reached. This will force liquidation, and the bears are then able to cover their sales at a profit.

Margins.—The amount of margins demanded by a broker depends on the character of the security traded in. An active stock that has a ready market is safe to carry on ten points margin—that is to say, at 10 per cent. of the market price—while one that has little or no market is

unsafe to carry on twenty-five points margin. There are brokers who, in their eagerness to get business, will take large risks by carrying stocks on slender margin, but a well-conducted office will thoroughly safeguard itself by demanding a sufficient margin in every case. If after buying a stock its price declines, the broker will call for more margin.

The question has often been raised whether brokers should not be compelled to require more margins. It is a difficult question, for there is much to be said on both sides. Undoubtedly if the average commission charged were raised from ten to twenty per cent. a large amount of small and irresponsible speculation (bordering close upon gambling) would be cut off, for many who could afford to put up 10 per cent. would be powerless to supply 20 per cent. This would reduce the volume of speculation, and to that degree would decrease the power of the stock market to distribute quickly the securities of the country. But on the other hand, there would be far less of that demoralization which now results at times from the entrance into Wall Street speculation of a crowd of men unequal, by reason of lack of capital and experience, to the task of intelligent trading.

Interest Charged.—In calculating the interest charged a customer, the broker usually averages what he pays for his time and call loans, and adds a trifle for trouble and office expenses. If the customer believes that prices will decline, he will sell short in order to reap a profit by buying at lower quotations. Then the broker borrows the stock for him from some other broker who is carrying it. In this case the customer saves the interest that attaches to a transaction on the long side, for the broker lending a stock receives full market value for it, and pays interest on the sum thus received at a rate usually lower than the bank rate. It is only when there is a short supply of stock that

a premium has to be paid to secure enough to cover short sales.

The established brokers' commissions for round trades, that is to say for both buying and then selling, are: $25 per one hundred shares of stock; $6.25 per five thousand bushels of grain; $10 per one hundred bales of cotton; and $20 for two hundred and fifty bags of coffee. For transactions one way the commissions are, of course, one-half the sum. The margins usually demanded on grain are $250 per five thousand bushels; on cotton, $100 per one hundred bales; and on coffee, $325 per two hundred and fifty bags.

The Customer's Control.[1]—A customer has full control over his account at all times, provided he keeps his margins good, and it is a custom for the broker to notify him when the margin becomes insufficient by reason of the movement in prices. The customer gives the order to buy and the order to sell. The broker merely acts as his agent. But the broker is bound to protect himself. On days of sudden panic, when the banks call in their loans, and prices fall five, ten, and twenty and sometimes even thirty points in a few hours, it may be impossible to reach the customer, or the customer may purposely keep out of the way. Then the broker may throw the customer's stock on the market for what it will bring. If he does not, it is because he feels sure of his customer, or has no time in the excitement to clear out all of the accounts, or believes that the panic will soon run its course and prices return to a normal basis. Many disputes arise over the disposition of accounts on a day of panic, and every such day is generally followed by a crop of lawsuits between brokers and customers.[2] An operator who deliberately "lays down on

[1] See quotation at end of Chapter V: "Publicity of Prices."

[2] Justice Day of the United States Supreme Court has rendered a decision in which he held that the broker was but an agent and was bound to follow the directions of his principal or give notice that he

his broker"—that is, lets his broker carry the burden and loss of his transactions in time of panic, and fails to make good his differences—may find all doors closed against him when he seeks again to speculate.

Customers may call for statements of their accounts at any time. They are usually rendered once a month, and always when an account is closed. Some customers prefer not to have frequent statements in order to avoid compounding interest. A broker's statement is a simple matter of bookkeeping, similar to a bill or statement that is rendered by a merchant for merchandise. Brokers, however, affect different stationery as best suits their ideas. The folder opposite is a specimen statement.

This statement shows that John Doe has bought and sold 100 shares of Atchison at a profit of $850, less commission, interest, and tax; and has bought and is still carrying 100 shares of Chesapeake & Ohio, and 200 shares of Reading first preferred.

Speculating Brokers.—It has been said that there is a class of brokers who, while acting as agents for customers, also speculate on their own account, and that others prohibit all speculations by partners and clerks and confine

declined the agency. The dividends on the stocks and the profits or losses belonged to the customer, who alone took the risk of the venture.

To the contention that the usual conditions did not exist because the broker was not obliged to return the very stocks pledged, which showed only a proprietary interest, Justice Day said that it lost sight of the fact that the certificate of shares of stock was not the property itself, being but an evidence of property in the shares. The certificate, as the term applied, merely certified the ownership of the property and rights in the corporation represented by the number of shares named. A certificate of the same number of shares, although printed on different paper and bearing a different number, represented precisely the same kind and value of property as did another certificate for a like number of shares of stock in the same corporation, and it was a misconception of the nature of a certificate to say that a return of a different certificate or the right to substitute one certificate for another was a material change in the property right held by the broker for the customer.

PLEASE EXAM

Folio 44.302

Dr. John Doe Esq. **In account curre**

This account has been and will be carried on margin according to
with authority to loan or pledge the securities c

DATE.			AMOUNT.			DAYS.	INTERE	
April	29	To 30 N.Y.C. & S L Rec^d						
	30	" 100 Atchison 72	7	212	50	13	15	6
	"	" Gov. Tax			25			
May	6	" 100 C & O 52 3/8	5	250	}	7	15	13
	"	" 200 Rdg 1st pfd 77 1/8	7	725	}			
	13	" Int.		13	96			
			20	201	71		30	75
May	13	To Balance	10	620	56			
		Long						
		100 C. & O						
		200 Rdg. 1st pfd						

BROKER'S STATEMENT

AND REPORT.

New York, May 13. 1901

th Richard Roe & Co., 15 Wall Street, Cr.

and customs of the New York Stock Exchange and its members,
bulk or otherwise for such sums as we see fit.

DATE.			AMOUNT.		DAYS.	INTEREST.	
il	29	By Cash	500		14	1	16
	30	" 30 N.Y.C. & S.L. 35	1045	65	13	2	25
y	3	" 100 Atchison 80½	8035	50	10	13	38
	13	Bal. Int				13	96
	"	Balance	10620	56			
			20201	71		30	75

Internal-Revenue taxes are charged as follows on all sales: Two cents per share on stocks; one cent for each $100 on products.*

RED TO CUSTOMER

* This tax has since been repealed.

themselves strictly to a commission basis. It would be of interest to know exactly how many members of the Exchange really resist the temptation to speculate on their own account, but of course it is impossible to find out. In a market report in a newspaper of 1835 the writer says: "One of the evil practices of the brokers is that of privately dealing in stocks as principals while they pass generally for mere agents in the Street. This practice is not permitted in the London Stock Exchange. Wood & Bogart stick to the legitimate business of executing the orders of their customers, without speculating privately on their own account." The same writer intimates that some of the brokers then did what would now be called "bucket-shopping" their orders—that is to say, not actually executing them, but paying or receiving the differences in prices after a customer has closed his account. This is gambling pure and simple, an illegitimate practice carried on extensively by persons outside of the Exchange, but sternly prohibited to members, and it is in many States prohibited by law. Operators who wish to make certain that brokers are not bucket-shopping their orders can demand, as they have the right to do, to be supplied with the name of the broker on the other side of every transaction. In order to avoid the appearance as well as the reality of bucket-shopping orders, the Governing Committee of the Exchange has made a rule that where brokers have orders to buy and orders to sell the same security, they must offer the security at one-eighth per cent. higher than their bids before making transactions with themselves.

The stock-broker usually arrives at his office before the opening of the Exchange, in time to consult the London prices, confer with his partners as to the day's policy, and perhaps wire a dispatch of information and advice to branch offices. His day's routine then depends on whether he remains in the office or represents the firm on

the floor of the Exchange. In either case he is fully occupied until after three o'clock, for besides executing orders for his customers he has to arrange for carrying the securities by loans at the bank, and look after the many details of a complicated business. After the close of the Exchange many brokers write, or have written for them, what are called "market letters," which are more or less elaborate reviews of the market with opinions as to the future of prices. These are manifolded or printed and mailed to customers. By four o'clock, and perhaps earlier, the broker is able to leave the Street for his home or club. His hours are short, but exceedingly busy. His clerks follow him as soon as their daily tasks are finished, and by six o'clock the financial district is deserted by all save the janitors and their families. Silence reigns in the streets recently so thronged and busy, and the only sounds heard are of girls jumping their ropes and boys playing ball. But in times of stress and trouble the brokers' offices may be kept open until midnight, while clerks pore over the books and anxious partners arrange their affairs for the next day.

Note.—An article by Eliot Norton in the *Annals of the American Academy of Political and Social Science,* May, 1910, may be consulted by those who wish to obtain a view of the legal relations between a broker and his client in the purchase or sale of securities. The following is a brief extract:

Of the Carrying Out of the Order.—The relation between the customer and the stock-broker created by the usual engagement being that of principal and agent, the principles of the law of agency govern its carrying out. If in any case the stock-broker carries out the order according to the intent of the customer, the customer is bound. This is the meaning of the stock-broker having authority. If, on the other hand, the stock-broker fails to carry out the order according to the customer's intention, the customer is not bound. In such a case he is not required to take any steps to assert this.

On the other hand, if he chooses to, he can ratify what has been done contrary to his intention. Ratification rests on the consent of the customer to be bound. Therefore he should, as a matter of precaution, repudiate anything done contrary to his intention, in order that his silence may not be taken and used as evidence of consent.

Another principle of the law of agency is that the law requires of one who undertakes an agency that he should exercise due care in and about what he is entrusted to do, and to act in good faith toward his principal. If he fails in either direction he will be liable in damages.

The degree of care which a stock-broker must show is to be measured by the standard of care which a faithful and intelligent stock-broker thoroughly versed in his business would show. It is not to be measured by the degree of care which one not a stock-broker would show, or by that degree of care which is customary, or which stock-brokers usually give, unless such degree of care is that which an intelligent, faithful and competent stock-broker would show.

The duty of showing good faith is very stringently enforced. In doing so judges incline to lay down general rules of conduct rather than to decide each case on its merits. Thus the rule is established and enforced without exception that a stock-broker cannot sell to or buy from himself, or his clerk, or a firm of which he is a member, and this without proof of fraud, and even in case where the price obtained for or given by the customer is as good or better than would otherwise have been obtained or paid. There is no established custom which would justify stockbrokers in violating this rule of law. These are the main principles of the law of agency which govern the carrying out of an order.

How, now, as a matter of *fact*, does a stock-broker carry out an order interpreted according to the customs, technical meanings and technical words already stated? He is authorized first to contract. This authority is qualified by two customs. Before stating them it is necessary that the "execution" of an order consists only of *the contracting* to buy or to sell the securities ordered upon the terms of the order, and an order is said to be "executed" when this is done. In other words, the "execution" of an order is the carrying out of the authority to contract. The two customs are:

1. An order in the regular form to buy or to sell securities can only be "executed," if at all, on the day it is given, unless it is expressly stated in the order that it is "good" for a longer period of time or for some particular period of time.

2. There is implied as a term or condition of an order in the regu-

lar form that the stock-broker shall try to "execute" the order as early in the time for which it is "good" as it is possible for him to do in accordance with the rules and customs of the stock exchange to which he belongs.

These two customs are so well established that a customer would probably be held bound by them, even though nothing was said about them at the time the order was given; and hence, if he does not wish them to apply to an order, he must say so clearly to the stock-broker. Assuming they do apply, the stock-broker's first step after taking an order is to try to execute it at the earliest possible moment in the time it is good for. If he neglects this duty he will be liable in damages.

REFERENCES

"Treatise on the Law of Stock-Brokers and Stock Exchanges," John R. Dos Passos, 1905.

"On Buying and Selling Securities through a Stock-Broker," Eliot Norton, 1896.

"A Simple Purchase and Sale through a Stock-Broker," Eliot Norton, "Harvard Review" VIII, No. 8.

"Stock-brokers' Accounts," Callaway.

"How to Deal with Your Broker," Warren.

"The Real Wall Street," Wm. H. Brown.

CHAPTER XVI

THE LANGUAGE OF WALL STREET

The language of Wall Street is especially full and rich. It has in addition to many technical words an argot of slang, often very expressive of the meaning to be conveyed, but sometimes puzzling to the uninitiated. So many are its technical and slang terms that glossaries have been published giving definitions. One of these contains a list of four hundred words and phrases in common use in the Street, and even this is not complete. The significance of the more important of the terms is indicated in appropriate places in the different chapters of this book as being more convenient for the reader, but it is necessary to bring some of them together so that their related meaning may be better understood and appreciated.

Many of the terms employed in Wall Street are likewise used in other branches of business, as for instance: money, the medium of exchange and the measure of value; credit, by which something of value is transferred to another on a promise of future payment; exchanges, which are the volume of the things of value or the representative of the things of value exchanged; the market, the convenient place where these exchanges can be made; the Exchange, an association for the purpose of providing a regulated market, and it is also the building in which the market is located. Exchange is also a term used to denote the system by which commodities, or other things of value, are exchanged between distant localities by the use of bills, checks and drafts; foreign exchange, denoting that

system as applied to international commerce and domestic exchange as applied to inland or domestic commerce. In Wall Street, however, these and other like terms are used with a precision which is usually lacking in other than great money centers.

Persons.—Wall Street employs many terms to describe the different persons engaged in the stock and money markets, in speculation and investment. Thus there are bankers, brokers, principals, investors, speculators, operators, professionals, manipulators, lambs, the public, insiders, outsiders, bulls, bears, plungers, scalpers, room traders, specialists, cliques, combines, pools, and syndicates.

Market.—Other terms apply to the character of the stock market. This market, we are told, is either strong or weak, firm, steady or soft, rigged or stagnant, active or inactive, in a flurry or panic or boom. Prices rise and fall, advance and decline, rally, recover, react, drop, and slump. They advance and decline by points. A stock is cornered, pooled, pegged, manipulated, pyramided or ballooned.

Position.—Other terms describe the position of different classes of persons in the market. Bulls and bears are either long or short. They have straddled or hedged. They have loaded or covered or realized, as the case may be. They have taken a flier or have been frozen or wiped out. Shorts may be squeezed. The lambs may be sheared. The bears may make a drive or they may be gunning a stock. Insiders may be planning a deal. The broker may be kite-flying. The speculator may have bought a put or call or spread. The banker may make a specialty of arbitrage business. The customer may give a stop order. He may have coppered a tip. The pool may be selling out. The syndicate may be washing sales by matched orders through curb brokers in order to market watered stock.

Routine.—Other terms apply to the routine of the

broker and the various tools he employs. He executes an order. He demands more margin from his customer. He makes out a comparison or exchange slip and makes delivery. He clears his stock. He hypothecates his security. He keeps his balance good at the bank. He gets his checks certified. He carries his securities on loans. He renders a statement. He consults the tape and the news slips and the bank statement. He will not bucket-shop his business or accept discretionary orders. He will not split his commissions. If he suspends, he is sold out under the rule. He accepts changes or give-ups (curb) in comparison forms.

Such terms as speculator and operator are practically synonymous, except that operator generally applies to a professional. A professional may or may not be a manipulator, but a manipulator is always a professional. The customer is the broker's principal. The broker is his customer's agent. Lambs are always outsiders, but not all outsiders are lambs. Public is a collective term for outsiders who do not speculate as a regular business, but enter the market in large numbers in bull movements, and remain out of it in times of stagnation or weakness. Bulls are always long of stock. When they sell they realize or liquidate. Bears are always short in the market, and they realize their profits by covering. Scalpers are room traders who buy and sell stocks on the narrowest profit, the difference in their favor being not more than ⅛ or ¼ of 1 per cent. A tip is coppered by acting contrary to the information it conveys. A pool is a combination of operators who make a common contribution for the purchase of a stock or stocks and divide the profits, if any. A blind pool is one in which all the members are kept in ignorance of its operations, except the one who manages it. A deal is the operation resulting from a secret combination or agreement among Wall Street men to effect a certain pur-

pose, generally of a manipulated character in the market. A corner is the consequence of bears selling more stock than is issued or than can be purchased in the market, so that they cannot make delivery and are obliged to settle at high figures involving heavy losses.

A market is steady when it holds its own. It is firm when it advances, and is strong when the gains are large. It is soft when it inclines to fall, and is weak when it declines. It is inactive when the sales are decreasing, and stagnant when the volume of trading is very small. Flurries and slumps are severe breaks in prices, that do not reach the dimensions of a panic. A market is rigged when it is manipulated. It reacts from an advance. It rallies or recovers from a decline. A point is 1 per cent. A stock is pegged when its price is held at a certain figure so that it cannot decline.

Kite-flying is the act of unduly extending one's credit, in such case as the issue of fictitious or fraudulent paper. It is kin to kiting checks in bank accounts.

Pyramiding is only possible in a bull market. A man on a slender margin buys a few shares of stock, and as the price advances uses his profit to buy more and still more, until on the original investment of a few dollars he has a paper profit, it may be, of thousands of dollars. Thus, stories are told of men who on an original purchase of fifty shares realized profits of $200,000. Usually, however, these inverted pyramids are overturned by some sudden reaction in the market before the speculator is content to turn his paper profits into cash.

A ballooned stock is one whose market price has been unduly inflated by manipulation.

An operator has straddled the market when he has got on both sides of it at once, the same as a gambler hedges his bet. He is taking a flier when he buys or sells for a quick turn. He guns a stock or makes a drive when he

tries to break its price so as to compel the longs to unload. Shearing the lambs is the Wall Street method of relieving novices of the money they have invested in speculation. The margins being exhausted, the lambs return to the slow but sure profits of their regular avocations. Wash sales are fictitious sales for the purpose of making fictitious prices. Scalpers sell on fractional gains.

Puts, calls, and spreads are what are called privileges; they are essentially bets on prices. When one buys a put he is practically betting that the price of a certain stock will decline. Some operators much prefer to buy puts than to sell short. When one buys a call he bets the price will advance. While the put or call specifies the number of shares to be delivered or called, there is no actual transfer of stock on them. A put is a privilege to deliver within a certain specified period a specified number of shares at a specified price. If the market declines, the holder of the put has a chance to buy the stock and deliver at the higher price named in the put, but as a matter of fact the transaction is closed by the payment of the difference in the prices. A call is the reverse of this operation. In this case the holder of the privilege can call on the person issuing it for a specified number of shares. If the market price has advanced above the price named in the call there is a profit. A spread is a combination of put and call. The holder has a privilege to deliver at one price or to call at another. For these privileges the buyer pays a sum varying with the time, amount, and price named in the paper. If the market fails to move as he expects, the buyer of the privilege is out of pocket the amount he has paid for it.

Classes of Stocks.—Wall Street has a variety of words that describe certain stocks or classes of stocks. Thus there are industrial, utility, motor, granger, and coal stocks. The "Big Four" is the stock of the Cleveland,

Cincinnati, Chicago & St. Louis. The "Nickel Plate" is the New York, Chicago & St. Louis Railroad. The "Pan-Handle" is the Pittsburgh, Cincinnati, Chicago & St. Louis Railroad. "Oils" is the name for the petroleum producers and refiners. When the Wall Street man speaks of "Sugars," he generally means not the raw nor the refined product, but the stock of one of a score of listed companies. When he speaks of St. Paul, he refers not to the great Apostle or the city of that name, but to the stock of the Chicago, Milwaukee & St. Paul Railroad. "Equipments" refers to locomotive and car-building companies.

When a corporation stops paying dividends, it "passes its dividend." When the books of a company have closed for the payment of a dividend, the stock sells ex-dividend—that is to say, the purchaser does not receive the dividend. A stock sells at par when its quotation is 100. It is above or below par by as much as it sells above or below 100. Carrying charges are the cost of carrying stocks bought on margin—that is, the interest paid to the broker on the amount he advances. Rights are frequently dealt in on the stock-market. When a company issues new stock it generally gives its stockholders the right to subscribe at par or some other price lower than the market price. Rights are therefore valuable and are bought and sold like stock. The terms flat and premium are used in the operation of borrowing stock as well as in other ways. If there are many borrowers, the competition will lead them to give full value for the stock without interest; that is "flat." Or if there is a great scarcity of stock the borrowing demand establishes a premium for it. If more than par is bid for a new issue of bonds, it is said that the premium is so much. If the country has suspended gold payments, gold then commands a premium over currency.

Community of Interest.—A term that has come into common use in Wall Street is "community of interests."

This term is the legitimate offspring of the "gentlemen's agreement," which died and was buried long ago. The gentlemen's agreement was understood to be an agreement between railroad magnates not to cut rates or resort to other practices resulting in wasteful competition. Gentlemen's agreements, however, were generally broken. A community of interests is more substantial and likely to be more enduring. It consists in bringing about such relations between great moneyed powers that the interests of one are interlaced with the interests of the others, so that they shall be directed under a common policy and for a common end. There is still a degree of competition, but extreme competition ceases, often by buying into each other's properties.

There are a number of terms used in the London market that are never heard of in Wall Street, as, for instance, contango and backwardation, which refer to the charges for carrying stocks to settlement day. Jobbers is also a London term. There are no jobbers in Wall Street, but stock-jobbing is a term in frequent use to describe the operation of buying and selling stocks for speculation accompanied by intrigue or manipulation.

Origin of Terms.—Many of the terms of the stock market are as old as stock speculation itself. The two main divisions of the market have been known as bulls and bears for more than two centuries. There have been many conjectures as to the origin of these terms. As a bull lifts and throws an object up with its horns, that may be the reason of his selection as a type of speculators who buy for an uplift of prices. As a bear seeks to depress prices, his name may be derived from the verb to bear, meaning to press heavily upon. By some it is held to be derived from the adjective bare, because the bear having sold short is bare of the stock. But a century ago the Wall Street bear was described as being like the hunter who sells a

bear's skin before he has succeeded in shooting the bear, and that is about as complete a description as could be given.

The parlance of the stock market has now become a recognized part of the language of commerce, and many of the terms, including such as "piker," are found in the later dictionaries.

REFERENCES

"Financial Directory," Howard Irving Smith, 1908.
"Community of Interests," John C. Nimmo, 1903 (circa).
"History of the Consolidated Stock Exchange," S. A. Nelson, 1907.

CHAPTER XVII

READING THE MARKET

More and more the requirements of business success call not only for special training in the technique of a trade or art, but also for an understanding of the principles which underlie it. The merchant, the banker and the Wall Street man of to-day, need to know something of political economy. A knowledge of theory is necessary as well as an expertness in practice. The notable success of the Germans [1] in industry, banking and the export trade is due very largely to the training they obtain in the admirable commercial schools of that country, and it is recognition of that fact which has caused the Chambers of Commerce of London, New York and Boston to take up the question of business education in a practical way,

[1] In Germany, business means something more than buying hats cheap and selling them dearly, something more than mere money-making. The head of a great industrial undertaking is a scientist in the true sense of the word. He is as far removed from the thought of making money, simply for the sake of money, as a civil engineer is removed from the thought of making profit out of a bridge which he is commissioned to design. It is the science of the thing that counts in Germany, the way in which a particular commercial problem is to be solved. Conduct your business, however small, scientifically, says the German, and the money will take care of itself.

It would be absurd to attribute to the remarkable commercial high schools and academies of Germany, all the credit for the success of the German business man; but the part that they play in commercial life is anything but small. They teach the technique of commerce, the economic relations of one industry to another, the significance of modern banks and railroads, and above all they teach the attitude which the business man must assume toward the State, the world, and his immediate competitors in business.

WALDEMAR KAEMPFFERT in *Scientific American.*

for the purpose of increasing the number and of raising the standards of schools of commercial education. A notable advance along this line has indeed been made in this country during the last twenty years. We have a number of high class commercial schools, and they are excellent and progressive institutions. But the object is not only to establish more professional schools devoted especially to finance and commerce, and to bring them into closer touch with business men, but to adapt the whole educational system of the country more and more to the requirements of modern commerce and industry.

So wide is the scope of Wall Street that any success there, which is not to be solely the result of mere chance, calls for a knowledge of economics, of geography, of politics and government, of accounting and to some extent even of science and philosophy. Therefore the educated man has the advantage there as well as everywhere else.[2]

Every speculator, every large investor, every man engaged in big business, even though he never buys or sells stocks, should know how to "read the market," which means:

a.—Reading "the signs of the times" in all parts of the world; and

b.—Reading the special conditions of the local situation.

Reading the "Tape."—Reading the market means something more than reading the stock tape; though there are Wall Street men who become so expert in reading the

[2] In all its aspects, business is becoming more and more a specialized profession, and our colleges and schools should so change their methods and courses that, breaking away from wornout traditions, they may fit the individual who seeks to be a power in the commercial world for its real problems. This does not call for any lowering of standards, but for such a change in methods as shall make education the effective handmaiden of modern commerce. I believe that the future prosperity and progress of this country will depend more and more upon the right kind of training being imparted to the great body of coming business men, who go to make up our business communities.—JAMES G. CANNON.

tape that the varying and rapid changes in prices there recorded mean much more to them than to others, and they become so sensitive to the tape as to be able intuitively to feel what is going to happen before it takes place. But these men, so sensitive to market changes of an hour or a day, may be entirely lacking in ability to grasp the complicated and world-wide conditions which combine to make a business situation of a year or five years. The man who tests everything by the tape is one who examines phenomena through a microscope; while one who investigates international economic and political conditions is like one who looks through a telescope.

The business man, and especially one whose interests are affected by the security markets, must of necessity have a wide vision, for the cable, the telegraph, the railroad and the ocean steamer have brought the uttermost parts of the world so close together, that the state of the market in New York may depend upon an event in Africa, a famine in India, a revolution in China, a short crop in Argentina, a speech in the English Parliament, a murder trial in Los Angeles, an editorial in a weekly paper in Philadelphia, or an election in Canada.

Any one engaged in business, therefore, whether in Wall Street or out of it, but especially if he is engaged in the stock market, must understand how to read the signs of the times, and after bringing together the various facts obtained from every part of the earth, be able to form a fairly accurate judgment as to the course of the markets. In so far as he is able to do this, he is able to reduce the risks of business; in so far as he fails, he is dependent upon chance like a mere gambler.

The main difference between the big man and the small man in affairs to-day, is not alone in the amount of capital and credit which they control, but in their ability to read the market. Even the big man, with all his range of

information, can sometimes see but a little way into the future, but he can see further than the man small in information and small in ability to understand the information which he may possess.

Agencies of Publicity.—Fortunately for the common man, and indeed for the whole world of commerce, modern agencies of publicity now make it possible for any one to obtain the main facts upon which to base a reading of the business situation. Publicity thus has a two-fold advantage, namely, that it renders manipulation more difficult, and at the same time gives to the ordinary individual at least some of the advantages formerly possessed only by those of extraordinary means. Publicity is the first safeguard of Democracy, and this applies alike in business and in government.

The modern business man must know what is going on in the world, and this is true not alone as to events in commerce, though that is of prime importance to him, but also to events in politics, events in science and even events in literature, because the publication of a new book may possibly affect profoundly the progress of civilization. He can hardly be taught how to combine the information he obtains so as to enable his mind to form accurate judgments. That he must learn for himself through experience. The principal sources from which he may obtain information upon which to form judgments may, however, be stated. These sources include:

The Newspaper.—The modern daily newspaper, which has developed news-gathering into a high degree of efficiency, may be depended upon to give the great events of the day in all departments—the mountain peaks of information. The financial page is especially pertinent.

Trade Papers.—Trade journalism has been wonderfully improved in recent years, and now in each important branch of industry, trade, and science, there are period-

icals representing it with a considerable degree of authority—and these supply the business man with much detailed information which he cannot ordinarily find in the great newspapers.

Government Publications.—Government publications of our own and other countries are important sources of information. No business man, for instance, should fail to have "The Statistical Abstract of the United States." The export merchant needs the daily "Commerce Reports"; and all interested in agricultural conditions will study *The Market Reporter,* just as bankers rely on the *Federal Reserve Bulletin.*

Manuals.—There are, in addition, certain publications, periodical, quarterly or annual, which are standard manuals of statistical or other information that are indispensable for ready reference. Among these may be mentioned the *Commercial and Financial Chronicle,* Poor's and Moody's *Manuals,* the *Stock Exchange Official Intelligence* (London), and others relating to corporate securities. *The Investor's Pocket Manual* (monthly) is for free distribution by brokers.

Financial Authorities.—There are also daily and weekly financial publications, such as the "news slips" described in another chapter, the *Journal of Commerce,* the *Wall Street Journal,* the London *Economist,* the London *Statist* and *L'Economiste Français* (Paris). Of value to both investors and speculators are the New York *Annalist,* the *Magazine of Wall Street,* the *Street,* the *Financial World* and the *Economic World.*

From all these and other public, as well as private, sources, the intelligent business man will strive to keep well informed in regard to the following points, all of which have a bearing upon the state of trade, the course of prices, the activity of the markets:

Politics.—(1) International:

(a) Relations of our government with any other foreign government, especially such as might produce friction leading to war, to the raising of obstacles for the interchange of business or for the conclusion of a favorable treaty.

(b) Conflicts of arms or diplomacy, or commerce, between other nations such as would have an influence on the rates of money or the prices of securities.

(2) Domestic:

(a) The conflicts of national politics such as are liable to result in change of governmental policy, particularly as regards the tariff, the railroads, and the industrial organizations; relations between employers and employees.

(b) The movements in State affairs liable to affect the laws and their enforcement, particularly as regards the franchise corporations, the banks and the insurance institutions, and as regards the laws governing the organization of companies, blue sky laws, anti-strike legislation, etc.

Products of the Soil.—(1) Crops: When it is stated that the annual product of the farms of the United States amounts to over $20,000,000,000 it becomes clear how basic to national prosperity is the yield of the principal crops; and cotton and wheat have a particular importance because as exports they insure to us our favorable trade balance.

The connection between the stock market and the productive agencies of the nation is necessarily very intimate. As the Street facilitates the movement of commerce, finances the railroads and great industrial enterprises, and advances the means for moving the crops to market, an upheaval in the Stock Exchange, if of sufficient magnitude, may be felt in every shop and mill and farm from the Atlantic to the Pacific. On the other hand, depression in

trade produces stagnation in speculation as well as in all other forms of productive enterprises.

The three main sources of a nation's wealth are its mines, its agriculture, and its manufactures. The securities dealt in on the Exchange represent the mines, the crops, and the products of the factories. If the mines are prolific, the crops bountiful, and the forges ablaze by night and by day, the fact is reflected in the Stock Exchange transactions. Prices advance, sales increase, speculation is active. Wall Street therefore keeps its fingers constantly on the pulse of trade. The three principal crops are cotton, wheat, and corn. The time was when "cotton was king," and a failure in the cotton crop spelled national disaster. Even now a short cotton crop would be not only a severe blow to the South, but also inflict a loss that would be felt more or less all over the country. A failure in the corn or wheat crop has more than once been the forerunner of a commercial crisis.

Crop reports are issued regularly by the Government Department of Agriculture, and these give official information regarding the acreage and condition of the growing crops. For instance, in April an estimate is given of the average condition of winter wheat; in June estimates are given of spring and winter wheat; in July the acreage and condition of corn and cotton; and so on through the year, each month's report giving a showing of all the principal crops of the country. Wall Street is not content to rely entirely on these official reports. Many brokerage houses make reports, most of them informing and reliable. Some newspapers have statements sent in from hundreds of correspondents in all sections of the crop area. The Government also issues monthly reports of commerce showing the value of imports and exports.

(2) Mining: Regular reports are obtainable as to the production of coal, iron, copper, oil, silver and gold; all

of these have important bearing upon business. To gold production has been given a special significance because of the belief of many economists (but not all) shared in by some bankers (but not a majority) that the volume of gold mined has a determining influence upon prices. The quantitative theory of money is the subject of much controversy, but whatever its real relation to prices, the output of the gold mines and particularly those of the Transvaal, from which monthly records are obtained, is watched closely by business men. Copper enters into so many modern uses, notably electrical, and there are so many important copper stocks, that the records of production and consumption are now of high importance in sizing up the business situation. The consumption of coal is of special significance to the coal stocks and of general bearing upon industrial activity.

An enormous output of gold such as followed its discovery in California, and more recently in the Klondike and the Transvaal, has been responsible for great "booms" in business and activity in speculation. Early in the nineties, however, depression in the coal trade caused a severe shrinkage in the prices of the coal stocks, and the whole stock market suffered thereby. In 1902 the market suffered from the strike in the anthracite coal region, and in 1919 in the bituminous fields.

Industries.—The United States is in a state of readjustment from a country that was chiefly agricultural into a country which is now more industrial than agricultural. Its great industries have passed into the hands of big companies whose securities are the leaders in the stock exchanges. Thus the industrial production is important both in a commercial and a financial way. The iron and steel trade has long been considered a barometer of business activity, and the statistical reports of production, and of "unfilled orders," and the reviews of trade

conditions by the *Iron Age* and other authorities have a marked influence on the markets.

Commerce.—(1) Foreign: The volume of our foreign trade now exceeds 10 billion dollars a year. Since the war of 1914-1918 it has greatly expanded. Prior to that time we owed the foreign world from $4,000,000,000 to $5,000,-000,000 for borrowed capital and public loans. Our so-called trade balances, averaging about half a billion yearly, were liquidated by payments of interest on these investments, by freights on foreign shipping, tourists' expenditures abroad, remittances to foreign residents, immigrant relatives, etc. As a result of a half decade of phenomenal exports and of restricted imports, however, we had, at the end of 1919, a credit balance of about $12,000,000,000 due us from other countries. Our export and import returns are fundamental data of study.

(2) Domestic: The statistics of domestic commerce are not so comprehensive as those of foreign trade, but nevertheless there are a number of methods by which its volume may be measured, for instance:

(a.) By bank clearings. As more than 85 per cent. of all the business of the country is carried on by checks, and as the great bulk of the checks pass through the clearing houses, it follows that the transactions of the 135 clearing houses of the country furnish a tentative test of the volume of trade; and it is possible by an intelligent use of the weekly statements to learn what section of the country is doing the best or suffering the most as the case may be.

(b.) By railroad earnings: The railroads are not producers of wealth, but transporters. They connect the farm and the factory with the consumers. They carry the corn, the cotton, the iron, and the manufactured products to the markets. So statistics of the gross earnings of the railroads afford an index of trade conditions. When,

therefore, one sees a statement like this, "Railway earnings for the first week in May increased 6.02 per cent. over those of the corresponding week of last year, and 19.9 per cent. over the previous year," it is fair to assume that trade is maintaining an upward trend. As much of Wall Street speculation is in railroads, and as possibly one-tenth of the nation's wealth is invested therein, it is needless to say how important from every point of view becomes the condition of these properties. Railroad reports are thus part of the chief literature of Wall Street. They are studied by its experts with analytical skill. The weekly statements of gross earnings collectively show whether business has gained or lost. The monthly statements show something of the management of the railroads, as these give not only the gross receipts, but also the operating expenses and the net earnings. It may happen that while a railroad is earning more, it is also costing still more to operate it; in which case, while the gross earnings show an increase, the net earnings reveal a decrease, and it is from the net earnings that interest and dividends are paid.

(c.) By railroad cars in use: If there is a shortage of cars, it follows that the business pressing for transportation is greater than the facilities. A large surplus of idle cars means depression. Car scarcity arrests progress.

(d.) By statistics of business failures: The monthly figures of commercial failures published by R. G. Dun & Co. and Bradstreet are very valuable indices to trade conditions. Those who have learned how to analyze them may learn much concerning present, and at least something about future, conditions. Next to the records of bank clearings they are the most important indices.

(e.) By trade reviews: Credit agencies and banks issue periodical reviews of trade from information gathered

from a multitude of correspondents throughout the country. Leading mercantile houses also issue authoritative statements of industrial and mercantile conditions.

(f.) By price index numbers: Our U. S. Bureau of Labor Statistics, the British Board of Trade, the Canadian Government, as well as the two New York credit agencies, Dun and Bradstreet, and the London *Statist* and the *Economist*, publish regularly price index numbers; while the *Federal Reserve Bulletin*, Washington, makes monthly studies of the index numbers of foreign countries. (See January, 1920, p. 26.) These show the movement of price levels of the leading articles entering into consumption. Just as the speculator reads values from the stock tape, so the business man may interpret fundamental economic conditions from a study of price indexes of leading commodities.

Prices that are very high or very low indicate an abnormal condition that spells danger of one kind or another. A rapid advance or decline in prices, increasing or reducing the cost of living, is of tremendous significance to all persons, especially those of fixed incomes such as wage earners and investors; and in these days of corporations a greatly increased number of persons draw fixed salaries or fixed incomes from interest on their investments. High prices for commodities usually depress the prices of those securities which bear a fixed rate of interest. The London *Statist* thus formulates the principle involved:

Viewing the subject on broad lines, and without going into a mass of detail of politico-economical nature, a hint for the practical business men is afforded by a contrast of the movements of index prices with those of Stock Exchange securities. When commodities advance prices of Stock Exchange securities recede; when commodities recede Stock Exchange securities advance. This is a general law, that is impressed by a contrast of the movement of Consols and of index prices for over 60 years. Of course, such movement now and again for a time is interfered with by political and other

incidents, but, spread over an extended period, there is a general feature of simultaneous movement (say, Consols rising and commodities falling, or commodities rising, and Consols falling) which is very remarkable.

Banking.—The conditions of the principal banks are shown by their weekly statements, especially the Banks of England, France and Germany; and the associated Clearing-House banks of New York must be kept close track of by every man of large affairs; for, as modern business is carried on by credit, and as credit is based largely upon gold reserves or commercial assets, the credit capacity of these great banks, and the amount of gold which is going into or coming out of them, either in domestic or foreign exchange operations, are of immense importance to the entire business world.[3]

Corporation Reports.—These are most valuable, and are becoming increasingly so as the policy of corporate responsibility is more extensively enforced. No economic development of the past ten years has been more important than the application of publicity methods to the large corporations, especially as regards the fullness and clearness of their financial statements. These are at once a guarantee of good faith to the public and a safeguard to the investor.

A railroad report is, or ought to be, a complete statement of the entire business of the railroad, containing a financial balance-sheet, a description of its physical condition and equipment, and detailed reports of operations in every department, showing the different sources of revenue, the amount and kind of freight carried, the number of passengers transported, the various objects of expenditure, the cost of improvements and operation, etc., and some general account of policy by the president.

[3] Consult *Federal Reserve Bulletin* (Monthly), Washington, and The *Commercial and Financial Chronicle* (Weekly), New York.

The anuual reports of the St. Paul and Pennsylvania railroads, and of the United States Steel Corporation, are regarded as being excellent models for fullness of information. To analyze a railroad report to the best advantage, it must be studied by comparison with preceding reports of the same company, and with reports of other lines in the same section of the country.

Method of Analysis.—The object of analysis is to ascertain the true value of the securities of the company. We ascertain, first, a road's mileage. To compare a piece of real estate with another property in the same street, it is necessary to reduce both to the number of feet fronting on the street. In like manner, to compare the operations of one road with those of another of different length, it is necessary to reduce every item of income and expense to per miles. Thus we find how much the capital stock is per mile, how much the gross earnings are per mile, what are the operating expenses per mile, what the fixed charges are per mile, what the net income or surplus is per mile, and how much this surplus amounts to on the stock. We then compare this exhibit with that of other lines in the same territory, study the history of the company, and learn all we can of the character of its management. We are now prepared to form a judgment: 1. Whether the company's capital is or is not above the average issue of lines in the same territory—in other words, whether it is or is not overcapitalized. 2. Whether the gross earnings per mile compare favorably, or otherwise, with those of the other systems. 3. Whether the percentage of operating expenses indicates economical management or not. 4. Whether the fixed charges are too heavy or otherwise. 5. Whether the surplus applicable to dividends exceeds the dividends actually paid, and whether or not it is likely to increase. If the price of the stock is 170 and the dividend is 6 per cent., it yields to the holder 3.52 per cent.; but if

the net income applicable to dividends amounts to 9 per cent., that means a possible yield of 5.29 per cent. on the stock at the market price. If the history of the company shows consistent, conservative, and honest management, we are, with all these facts in our possession, prepared to determine whether the market price is too low or too high. To Albert Fink, long pool commissioner, is due the credit of having given a scientific form to railroad reports, and the leading companies now conform more or less to his ideas. Those who wish to get a close and critical view of this scientific form should consult Thomas F. Woodlock's "Anatomy of a Railroad Report."

Technical Position.—In all important lines of business, all this information must be gathered, studied, carefully analyzed, and applied. But they are particularly essential in stock speculation, which involves larger risks in forecasting the future.

But, in addition to all this, the stock speculator must study the stock market itself so as to inform himself as fully as he can as to its condition: whether there is an over-supply of stocks on hand ready to be sold, or a big short interest; what certain influential "interests" or heavy operators are doing; whether the supply of money for speculative purpose is, or is not, to be ample; in other words, the whole technical position of the market. The following from the financial page of the New York *Sun* gives an indication of what is meant:

The week's stock-market has been of peculiar character. Many of the prominent shares, including nearly all those which are commonly called speculative leaders, wavered back and forth in an uncertain way, as if professional operators were dubious in their minds as to the exact course, marketwise, that they should pursue; and one or two of these stocks, notably Union Pacific, have been distinctly heavy. In fact, the weakness of Union Pacific has constituted the chief argument with speculators for selling stocks. No reason of any substantial importance has presented itself for a de-

cline in this issue, and the strong probability is that the fluctuations of the stock, which have been highly irregular lately, have represented no more than the market operations of two or three large capitalists who are acting upon the theory that for the time being a series of profitable turns may be made by selling the stock when it rises a few points and buying it after a similar decline.

Price Movements.—Much may be learned from the study of security price movements to throw light on the conditions that affect security values. As a rule rising commodity prices, however slowly or rapidly, mean an increased demand for commodities. This applies to farm products or manufactures. Any permanent gain in consumptive demands must in due time mean an improved demand for larger facilities for production—for investment capital or for increased dividends on the existing basis of investment. Therefore stocks rise. Larger crops mean increased purchasing power, which in turn means rising demand for the articles of farm consumption and better prices. Good crop yields, as a rule, mean rising security prices; because of the larger buying capacity of the rural population, of the larger earnings of the railroads and the stimulus to industry arising from rural and railway demands, as well as from lower costs of foodstuffs and raw materials. On the contrary, poor crops nearly always superinduce a reaction in security values; if not immediately, sooner or later, except when one poor crop year comes between a series of good crop years on both sides. Then it has only temporary effect. This reasoning applies to long swings of the market, especially as related to railway stocks, grain and cotton.

During the years since the United States began to be the world's leading railway builder (from 1865 to 1913, inclusive), the ever-broadening basis of railway operation, in the interest of agriculture and manufacturers' markets, gave to railway stocks the position of the keynote to the

stock market. There was for that period no better index than railway stock prices to market conditions. In the following table of the high and low average prices for 60 railway stocks, for the period of 40 years (1873-1913) there appears to be a recurrence of a ten-year cycle of prosperity and depression, when low-water marks in railway stocks reappeared, beginning with 1873:

Average Quotations of 60 Active Railway Stocks, 1873-1919
From R. G. Dun & Co., New York.

	High	Low		High	Low		High	Low
1919...	72.90	59.68	1903..	109.10	82.62	1887..	72.35	59.03
1918...	73.10	63.30	1902..	116.27	101.03	1886..	71.99	55.28
1917...	85.59	59.65	1901..	103.98	81.36	1885..	63.47	43.45
1916...	88.47	80.64	1900..	84.87	68.49	1884..	66.28	38.58
1915...	86.08	75.11	1899..	76.29	66.72	1883..	79.86	57.68
1914...	90.23	75.92	1898..	67.04	52.55	1882..	94.85	63.77
1913...	101.30	84.09	1897..	59.99	45.64	1881..	101.54	69.93
1912...	105.97	99.82	1896..	60.76	40.71	1880..	87.04	51.74
1911...	107.22	95.96	1895..	56.07	44.49	1879..	67.86	33.35
1910...	115.21	93.24	1894..	52.49	47.37	1878..	37.77	25.51
1909...	116.30	101.16	1893..	66.31	41.71	1877..	36.33	20.58
1908...	105.26	79.69	1892..	68.49	62.32	1876..	47.28	27.58
1907...	112.25	76.35	1891..	66.78	55.29	1875..	53.50	36.14
1906...	120.99	109.83	1890..	69.93	53.61	1874..	58.79	41.79
1905...	117.90	106.15	1889..	66.29	59.55	1873..	69.61	40.88
1904...	107.76	85.74	1888..	65.09	55.71			

"Reading the market," therefore, requires scientific knowledge combined with the art to apply this knowledge practically so as to achieve results.

1. For example, the Panic of 1873 and the ensuing depression resulted in a sharp decline in railway construction, another name for fall in prices, for the next five years, when the resumption of specie payments in 1879 assisted materially in rapid recovery of prices.

2. The reaction of 1884-85 was only temporary, making at best only a secondary interruption to the expanding process through which the entire economic organization of the country was then going. This period had two record years of railway building—11,569 miles in 1882, and 12,876 miles in 1887.

3. The second major panic and depression in prices of railway stocks came in 1893-96, just 20 years from that of 1873. Likewise, the highest points in the period, 1881 and 1901, are exactly 20 years apart; as were the lowest, of 1877 and 1896.

4. The reaction of 1907 and 1908, in which the San Francisco earthquake precipitated a degree of security liquidation upon the market, in a period of high prices, was also a temporary setback in the long upward swing from 1896 to the Great War of 1914-1918.

5. Within the period 1873-1913 there were five 10-year points or price recession and recovery, namely: 1873, when a paper-money panic turned the tide of prices; 1883, when cut-throat competition demoralized railroading; 1893, when the severest industrial cataclysm of the century befell this country's business interests; 1903, when the enormous increase in capitalization of industrial combinations began to limit railway expansion; and 1913, when the extremes of anti-railway regulation succeeded in impairing the credit of the railroads as a whole. Recessions of 1914-1919 were, of course, due to war conditions under Government control affected values.

A Typical Midyear Comment.—As a typical example of "reading the market" the following is suggestive of the numerous factors taken into account in a July market:

The stock market, although showing no great expansion, displayed a better tone toward the close of the week, and this despite the impending three-day holiday, the absence of many traders and the higher call money rates. Prices advanced easily on relatively light dealings.

A noticeable feature of the week's trading was the change in professional sentiment to a more bullish attitude. Stocks generally held their advance in the face of profit-taking and closed at or near their high levels of the week.

Factors contributing to the price advance were the optimistic utterances of one of the largest speculative operators on the stock

exchange and his commitment to the constructive side of the market, which induced short covering in many of the leading speculative issues.

The action of the market testifies to its sound position, and while the strain imposed upon the money market by the heavy withdrawal of funds from the banks incidental to the usual half-year settlements tends to restrict stock market operations, this condition is only temporary and will pass with the completion of the July 1 payments and the return of money to its normal channels.

REFERENCES

For official summaries of market conditions as they relate to banking, read the *Federal Reserve Bulletin*, Washington.

The better known weekly and monthly periodicals treating of market conditions, including trade and financial, may be consulted with profit.

The financial pages of the leading city dailies, especially the stock and bond market columns, should be read regularly to keep in touch with developments.

Annual reports of the leading corporations, such as the Pennsylvania Railroad and the United States Steel Corporation, are worthy of special study.

CHAPTER XVIII

THE CREDIT INSTITUTIONS AND THE CLEARING-HOUSE

Addressing an assemblage of bankers, early in 1902, Lyman J. Gage, then Secretary of the Treasury, said that the nomenclature of the Street ought to be changed; and that instead of speaking of rates for money, we should use the term "rates for credit." As Mr. Gage shows, when rates for money are high, people become alarmed about the scarcity of money as indicated by these high rates, when substantially there has been no change in the volume of money, either in the hands of the people or in any under control of the banks. What ought to be quoted is not money, but credit. It is credit that is difficult to get, not actual money that is becoming scarce. Macleod, the English economist, in fact, defines the money market as a credit market, and speaks of a bank as "a manufactory of credits." The banker is a credit merchant. Credit divides the field with gold. The Federal Reserve Act makes Federal reserve notes, which comprise half of the general stock of money in the United States, rest on commercial paper as a dependable type of security of currency.[1]

Credit Operations.—Wall Street is not exceptional in carrying on the vast bulk of its operations on credit. Dr. David Kinley, of the University of Illinois, estimates[2] that from 80 to 85 per cent. of the total business of the United States is done by the use of credit instruments—from 50 to 60 per cent. in the case of retail trade and

[1] "The Federal Reserve," H. Parker Willis, Chapter IX, 1915.
[2] See Document 399 of the Monetary Commission publications.

over 90 per cent. in the case of wholesale trade. The merchant, as well as the broker, goes to the bank for credit. "Commerce," said Daniel Webster, "can not exist without credit. Credit is the vital air of the system. It has done more, a thousand times, to enrich nations than all the mines of the world." Credit makes one dollar do the work of many dollars. Some of the old prejudice against money-lenders still exists, and in certain sections of our country bankers are even now held in distrust and fear. It is the distrust and fear of ignorance.[3]

Value of Credit.—It has been said that the man who makes two blades of grass grow where one grew before is a benefactor of his kind. Then certainly a man who can, by the credit system, multiply the usefulness of a dollar is equally a public benefactor. Money inert, unused, is of no benefit. It is only when put in use that money becomes of value. In storage it is a burden; in action a beneficence. It is never more in action than when made the basis for credit. It is for this reason that a large surplus held by the Treasury becomes an evil. The Government, least of all, can afford to be a hoarder of money. Economists in fact hold that money itself is only a high form of credit, a bill of exchange to facilitate commerce, though we employ as the basis of all money, gold, a product of stable and constant value that is a part of the general wealth. The hoarding of money is, therefore, a contraction of credit and a blow to business activities and national prosperity.

The extent to which the banks multiply the power of money through their system of credit is shown in a striking manner by statistics gathered from the report

[3] Andrew Jackson in a letter confessed that he was opposed not merely to the United States bank but to all banks. His prejudice is of the same kind as exists to-day against corporations; and springs out of a failure to distinguish between beneficent use and injurious abuse.

of the Comptroller of the Currency. On June 30, 1910, the aggregate deposits of all the banks and trust companies in the United States amounted to $15,283,396,254, while the actual money held was $1,414,600,000. Thus the amount of credit held subject to demand was over ten times as great as the amount of money held in reserve. On December 31, 1919, reports of 9,066 banks in the Federal Reserve system, with deposits of over $21,108,000,000, showed cash in vaults of only $691,173,000, or 3.27 per cent.; and, including cash in vaults with lawful reserves in Federal Reserve banks, 12.2 per cent. The major bulk of banking power is in the form of liquid credit resources. Stocks and bonds are fixed credit.[4] In Great Britain the proportion of credits to cash reserve is even greater than in this country.

Credit in Modern Business.—Banks collect and distribute credits. The capitalist is a man who uses his own money and credit in the transaction of business. A banker uses his own money and credit as well as the money and credit of others intrusted to him in the transaction of business. On the one hand, there are individuals who possess money, but have no immediate business or investment in which to employ it; so they deposit it in banks for convenience, safe-keeping, and in some instances to draw interest upon it. Other individuals are in business and need money or credit to carry it on; these go to the banks and borrow it at the prevailing rate of interest. As the broker is an agent between buyers and sellers, so the banker is an agent between borrowers and lenders. In the complexity of his affairs the modern business man, however, may become at the same time both a borrower and a lender. He is constantly depositing credits in the

[4] If wealth consists in those things which man most desires and which possesses exchangeable value, then credit is wealth.

bank, and at the same time is drawing them out in the shape of loans.

Lending of money or extending of credits, as a business, is carried on by individuals who are known as private bankers and by corporations called banks. The first banks served only the purpose of providing money for Government uses. Then they became depositories for safe-keeping of money, and vehicles for its transfer from one locality to another. Gradually they have assumed other functions of banking, such as the issuing, lending, and borrowing of money.

Savings Banks.—There are two kinds of these—stock and mutual. Savings banks receive deposits on which they pay interest, and loan money on real estate or invest in approved bonds and other safe securities under restrictions prescribed by law. They take the small savings of many people and invest them in a way that will be safe and profitable. Security is the first great consideration in a savings institution; income comes second. There are several savings banks in the Wall Street district. Savings banks figure largely in the investment market. In 1916, 622 mutual savings banks, with 8,592,271 depositors, had nearly two billion dollars, or 44 per cent. of their resources, invested in bonds and other securities (Kniffen).

Commercial Banks.—Commercial banks are institutions both of deposit and discount; that is to say, they receive deposits subject to withdrawal by check and lend on securities or negotiable paper. National and State banks are of this class. But the National banks are also banks of issue or circulation. They may, under the Reserve Act, obtain Federal Reserve notes, which circulate much like Government money. These are issued against commercial paper, bills of exchange and gold or gold notes, deposited with the Federal Reserve agent or otherwise as collateral. State banks do not issue notes, as there is a prohibi-

tory tax of 10 per cent. upon State bank circulation.[5]

Trust Companies.—Trust companies receive and loan money like commercial banks, and can also loan on real property. Moreover, they accept and execute trusts, acting as trustees for estates and corporations. They were formerly supposed not to do a general banking business or to allow clients to draw on their deposits by check. A few companies may still limit their business strictly to the original plan, but nearly all of them have broadened out so as to do business the same as National and State banks, and also to underwrite securities like private bankers. They cannot, however, issue notes.

Private Bankers.—The private bankers do business much the same as incorporated banks. They receive and loan money. They act as financial agents for domestic corporations and foreign banking-houses. They underwrite new issues of securities. They issue letters of credit. They deal in foreign exchange, and most of them export and import gold when the occasion requires.

National Banks.—Of these various classes of money-lenders the most important are the National banks. A statement by the Comptroller of the Currency shows that on September 12, 1919, the National banks of the United States held as deposits of other banks and trust companies \$1,845,000,000, the amount due from State and other banks and trust companies being \$439,000,000. The Federal Reserve banks are depositories for an increasing proportion of the Treasury funds. Formerly the cash reserves of the National banks formed the basis on which rested the vast output of current credit.

Reserve Centers.—The old reserve system created what were known as Central Reserve and Reserve Cities, New York being the most important of three central reserve

[5] "The A B C of the Federal Reserve System," Chapter VII, by E. W. Kemmerer, 1918.

cities. The National banks in these cities were obliged to maintain at all times a reserve in specie and legal tenders equal to 25 per cent. of the total deposits. But they were permitted to receive as deposits, on which interest was paid, one-half of the legal reserves which National banks in the other reserve cities of the country were required to keep. The banks of these interior cities, therefore, had the advantage of earning interest on one-half of their reserves, while the New York banks had the advantage of the power which comes to them as the holders of the deposits of country banks. Country banks were allowed to deposit 60 per cent. of their reserve in reserve and central reserve cities.

Of the total specie and legal tenders held by the National banks of the United States on December 5, 1911, over 30 per cent. was on deposit in New York City. It was as a depository of reserves that Wall Street, therefore, acquired its standing as a money center.

Decentralization under Reserve System.—Under the Federal Reserve system of banking this cumulative tendency on the part of national bank reserves was taken cognizance of by providing that a bank's main reserves should not be kept in the individual bank but in the custody of the Federal Reserve bank of each district. This massing of reserves was expressly planned to prevent abuses under the older system of reserves of becoming so non-liquid as not to be available for quick mobilization when emergencies arose. It aimed also at preventing the reserves from being allocated to non-commercial uses, as well as to eliminate the overworked tendency to employ these reserves for investment or speculative purposes in the stock and commodity markets of the larger financial and commercial centers, often to the sacrifice of the industrial and commercial requirements of the localities and districts from which the individual bank reserves were drawn.

Under this policy, banks in the central reserve cities of New York, Chicago and St. Louis were at first required to have 18 per cent. of their demand deposits and 5 per cent. of their time deposits in prescribed proportions in the Reserve bank or in their own vaults; banks in Reserve cities to have 15 and 5 per cent. respectively, and other member banks to have 12 and 5 per cent. respectively, in their own vaults, in the Reserve Bank or in both. After June 21, 1917, the legal reserves were by Act of Congress required to be kept in the Federal Reserve banks. Thus, as was anticipated, three results were definitely achieved: A reduction in the proportion of deposits allocated to reserves; the insurance of ready liquidity of the reserve by requiring more of it to be in cash and short-term commercial paper; and, finally, taking away the permission to include balances in other commercial banks as part of the required reserve.[6] Each of these perceptibly affected the position of the Wall Street money market.

Growing Size of Banks.—In recent years there has been a notable expansion in the size of the money market. Wall Street has required larger banking machinery. The formation of great syndicates and immense corporations has called for banks of larger capital and resources. Syndicates that are conducting operations involving tens and perhaps hundreds of millions of dollars require accommodations that would have seemed incredible a few years ago. So three banks have increased their capital to $25,000,000 each; another to $15,000,000; and one of $10,000,000 has a surplus of over $35,000,000 in addition. Others have augmented their facilities in many ways. Large State banks have established numerous branches. Several of the principal banks are allied with the most powerful private bankers and individual capitalists and

[6] Willis, H. P., "The Federal Reserve," Chapter X: "The New Banks," 1915.

corporations. Of the 53 banking institutions in the Clearing-House with a total capital and net profits of $684,880,-200, for the week ending June 5, 1920, there are 9 whose capital and net profits amount to $376,066,700. Therefore, nine institutions are larger than the remaining 44. Of the total net demand deposits of the Clearing-House on June 5, 1920, amounting to $4,218,205,000, ten institutions out of 52 held $2,807,902,000 or 66 per cent.

Whether this concentration of the money power is to be feared or welcomed, is the same question involved in the organization of the trusts and the consolidation of the railroads. It is the same question that is put in the chapter on the private banking houses. As is suggested there, concentration is not to be judged so much by its size as by its acts. Concentration of capital and credit is greatly to be desired when it is a power beneficently used. When it is abused it is greatly to be dreaded. But that is equally true of political power whether exercised by a despotism or a democracy. Majorities may make their power a fearful menace. The financial[7] concentration has, on the whole, exercised its power for the good of the country, and this kind of coöperation is something very different from "a money trust," for the correction of whose alleged dangers the Clayton Act of Congress was passed.

Competition.—It should be remembered that along with this growth in the size of banks, there is also an intense competition among the banks. Just as the stock market is open at all times to any one who may wish to enter it, so the money market is open to all who may possess the credit to command its resources.

[7] It is by reason of financial regulation and money centralization under established laws of prudence in banking that rates of interest are lower in the city than in the country, and lowest in the most concentrated and most efficiently financed centers.—C. W. Barron.

The Clearing-House.—Fifty-three of the National and State banks and Trust Companies of New York are members of the Bank Clearing-House,[8] and other banks and Trust Companies of the city and of nearby New Jersey points clear through the member banks. The Subtreasury is also a member of the Clearing-House and makes its daily exchanges there. This institution, established in 1853 and whose building in Cedar Street is one of the architectural ornaments of the city, clears the immense exchanges of New York which are 56 to 60 per cent. of the clearings of the United States. It performs the same office for the banks that the Stock Clearing-House does for the stockbrokers. During the fiscal year ending September 30, 1919, the exchanges of the Clearing-House banks amounted to $214,703,444,468. It is obvious that if this stupendous sum represented actual deliveries in payment of checks and drafts, if each bank had to send to every other bank to make collections, and its messengers obliged to carry back the money due their bank, in specie or legal tenders, the business of New York would be so congested as to produce a blockade or paralysis. But by meeting in the Clearing-House and there ascertaining what each institution owes the others, and by a simple and ingenious method of clearances, establishing balances which are settled by cash payments, the immense business of the banks is conducted as easily and safely as if, instead of fifty-three banks, there was only one, and all transactions passed through its doors. It takes less than an hour to clear a day's exchanges. The $214,703,444,468 of exchanges in 1919 were settled by payments of cash balances aggregat-

[8] The Clearing-House is an institution by which all the banks which join in it are formed, as it were, into one huge banking institution for the purpose of transferring credits from one bank to another without the use of coin, just in the same way as credits are transferred from one account to another in the same bank without the use of coin.—Henry D. Macleod.

ing only $20,950,877,483. In other words, the Clearing-House eliminated about $193,000,000,000 that would have had to be paid in actual delivery and individual settlement of every item. The percentage of balances to clearances was only 9.75. In one year it was under 3, and the average from 1854 to 1910 was under 5. The exchanges of May 10, 1901, amounting to $598,537,409, were settled by payments of balances amounting to $23,873,115. In one day in May, 1902, the Chatham Bank settled its exchanges, amounting to $1,323,694, by receiving a balance of ten cents.

Method of Clearing.—There are three daily clearings—at 10 o'clock, at 1 and at 3 P. M. Each member bank sends to the Clearing-House at 9 to 10 two clerks, one of whom presents to each of the other banks in turn the checks and drafts which it holds upon it, while the other clerk receives the checks presented against it by the other banks. It ordinarily takes only a few minutes to make these exchanges, the operation moreover being facilitated by the fact that an hour earlier seven of the biggest institutions clear their mutual exchanges by themselves. As soon as the exchanges are effected it is a simple operation to ascertain which banks are creditors and which are debtors. The debtor banks have then until 1 p. m. in which to make payment of their debit balances, payment being made not to individual banks but to the Clearing-House, which distributes the amount to the institutions which are creditors. Of course, the credits and debits must exactly balance. At 3 P. M. members meet to return items received in the morning exchanges which are "not good," etc. Each exchange clearing has a separate set of rules.

Prior to the Federal Reserve, debit payments were made in two ways: (a.) In United States gold coin, gold or legal tender notes. (b.) In Clearing-House certificates secured by deposits of securities in the Clearing-House vaults.

Now debits are cleared by adjustment through the Federal Reserve Bank of New York, thus relieving the Clearing-House of the custody of funds.

The manager or assistant manager of the Clearing-House presides at the daily clearings. The duties of these officials are very responsible, requiring men of the highest character and efficiency. Even in the week of the Equitable Building fire in January, 1912, when the clearances had to be carried on in the Hall of the Chamber of Commerce in Liberty Street, because access to the Clearing-House building in Cedar Street was impossible, the exchanges were made without delay and the balances paid to the last cent.

Other Clearing-House Functions.—But the Clearing-House has more important functions than even that of providing the machinery for clearances, though that was its first duty. It assists member banks temporarily embarrassed and saves them from suspension. In times of imminent panic, it issues Clearing-House loan-certificates, and thus prevents what might result in a condition of general banking and commercial insolvency. The loan-certificates thus issued in times of dire emergencies are in the nature of "temporary loans made by the banks associated together as a Clearing-House Association to the members thereof, for the purpose of settling Clearing-House balances." They are a species of inter-member currency good only at the Clearing-House, and retired as soon as the danger of panic is over.[9] The Clearing-House establishes rates of charges for collections of out-of-town checks.[10] It has also been more than once proposed that it should add another and still more important function, that of fixing a daily rate for call loans, by a committee

[9] "A History of Currency of the United States," A. Barton Hepburn, pp. 353-354; 390-393; 439-440. New York, 1915.

[10] See Constitution of the New York Clearing-House Association, January, 1920.

of bankers, and this rate would be binding on all the member banks and the institutions that cleared through them. This would have given the Clearing-House much of the power now exercised by the Bank of England, which, by its rate of discount, safeguards the English money-market and prevents many monetary panics.

The suggestion, by the Clearing-House, of forcing uniformity in rates of interest on out-of-town bank deposits, is now effective as based on the Federal Reserve discount rate prevailing.

Expansion of the Clearing-House.—In 1911 there was a most notable extension of the scope and effectiveness of the Clearing-House. It admitted to membership most of the trust companies of the city. This admission immensely strengthened the financial position of the whole country; and had the advantage of making the weekly Clearing-House bank statement a more complete exhibit of banking conditicns in New York. As such it was a notable recognition of the collective responsibility of this financial center to the public.

Another great improvement in the New York Clearing-House has been the establishment of a system of examinations of member institutions and the employment of a staff of competent examiners for this purpose. This enables the Clearing-House to keep a closer watch on its members for the common interest of all, thus affording a larger protection against unsound banking and the liability to insolvency. Other clearing-houses follow this system.

The City Collection Department of the Clearing-House was inaugurated late in 1917. Under the plan now operated members deposit checks, drafts, etc., against individuals, firms and corporations located south of 14th Street. These items must be in separate envelopes, addressed and sealed. Items deposited by 10 o'clock are delivered by eleven, and returns received at the Clearing-House by 1:30

as a rule, to be cleared with the regular exchanges on the next day.

Clearances in the United States.—There are 135 clearing-houses in the United States whose exchanges in 1919 amounted to $417,519,523,388. Collectively they are the conservators of the credit and business of the country. They administer their supreme trust with magnificent efficiency and justice. They demonstrate the possibilities of intelligent and fair coöperation which is the fundamental principle of modern commerce and industry.

Plant of the Money Market.—The Clearing-House, the banks, and the trust companies, constitute what may be termed the plant of the money market. Although the Clearing-House has lost none of its value as a mechanism for effective interbank settlements in this one of the world's major credit and money markets, the advent of the Federal Reserve Bank has had the effect of coördinating the commercial operations of this market under its own general direction. It is primarily the center of the domestic commercial banking system. There still remains to be developed resources and institutions of credit and capital adapted to the promotion of other than the established enterprises, to handle speculative resources and to function on a large scale for the requirements of international financing. Numerous special banking institutions have sprung into being for external trade purposes in recent years. Our acceptance laws, also the Webb and the Edge Acts are adjustments in that direction. But if New York is to become one of the world's leading markets for credit with which to organize and develop the world's productive resources, it must develop credit institutions more fully adapted to these needs, unhampered by the jealousies of speculative enterprises.

Reserve Settling by Book Entries.—One of the most notable departures in the clearing operations among New

York City banks, since the Federal Reserve System came into effect, is the practice of settlement by book entries rather than by carrying money to the Clearing-House to cover daily debit balances. Early in 1917 the Corn Exchange Bank, and later the Liberty Bank, adopted the plan of having the Reserve Bank settle the balances for or against them. This means that the Reserve Bank was authorized by these members to pay out or to receive money in the daily settlements at the Clearing-House.

"The plan," said the New York *Times* at the time (March 22, 1917), "is similar to the authorization given by some uptown banks by their Wall Street correspondents to attend the Clearing-House settlements for them. After the day's clearings the representative of the Corn Exchange presents to the Reserve Bank a memorandum showing a debit or credit balance which his institution had for the day. If the Corn Exchange is a debtor the Reserve Bank deducts from its account the amount of the debt and pays it into the Clearing-House when it makes its own settlements. In other words, the Reserve Bank in paying its balances, or in receiving cash due it as a result of the day's clearings, adjusts its own account with that for which it is authorized to act as settling agent, and makes one settlement. . . . This dispenses with the trouble and risk of having its messenger carry cash to and from the Clearing-House and encourages the member banks to carry larger balances in the Federal Reserve Bank."

At the present time all members clear in precisely the same manner at the Federal Reserve, by the newer and more economical system of debiting or crediting the respective accounts as authorized out of the member bank balances in its custody. It, of course, relieves the Clearing-House entirely of deposits once held in its vaults for settlement purposes, of gold coin, or government notes to cover possible debits of the individual banks.

REFERENCES

"Bank Credit," Chester A. Phillips, 1920.

"Principles of Money and Banking," Charles A. Conant, Vol. II.

"Credit of Nations," J. Lawrence Laughlin, 1918.

"Federal Clearing Houses," Gilman, 1899.

"Traite Theorique et Pratique des Operations de Banque," J. G. Courcelle-Senevid, 1876.

"Bimetallism," Leonard Darwin, 1898.

"Chapters on the Theory and History of Banking," Charles F. Dunbar, 1897.

"Money and the Mechanism of Exchange," W. Stanley Jevons, 1893.

"A Study of the Theory of the Medium of Exchange," David Kinley, 1904.

"Credit and Its Uses," Wm. A. Prendergast.

Publications of the National Monetary Commission, Washington, 1910-11.

"The Bank and the Treasury," F. A. Cleveland, 1905.

CHAPTER XIX

THE USE OF CREDIT IN STOCK EXCHANGE TRANSACTIONS

The credit which Wall Street uses in its various operations is obtained primarily from the banks and trust companies in the financial district. While it is true that not all of these institutions are what may be called "Stock Exchange banks," and a number of them pay much more attention to financing trade and commerce than to financing the issue and sale of securities, yet nearly all, if not all, bear some relation to the security market, and many of them deal largely with brokers.

Out of Town Loans.—In addition to these local institutions the stock market obtains a large amount of credit in the shape of direct loans made by banks and trust companies in interior cities, carrying on this business through their bank correspondents in New York. At times the aggregate of this invisible credit affects materially the position of the money market. In 1906 it was estimated that the loans of outside banks in New York were from $300,000,000 to $500,000,000. Wall Street likewise at times obtains credit, in imposing amounts, from European money centers.

Money and Securities.—The different ways in which the money and the stock markets meet are concisely but comprehensively summed up by Professor Jacob H. Hollander as follows:

(1.) Stock exchange securities are used as collateral to secure mercantile discounts and personal loans in the insufficiency of commercial or personal credit.

(2.) In the interval between original sale and ultimate absorption by investors newly issued corporate securities are used by underwriting syndicates and syndicate participants to secure bank advances.

(3.) Banking institutions invest in stock exchange securities such part of their resources as are not employed in loans and discounts in consideration of interest return and an anticipation, semi-speculatively, of appreciation in market value.

(4.) Bond houses and stock-brokers engaged in the sale of investment securities obtain bank loans as working capital upon unsold holdings.

(5.) Speculative purchases of stock exchange securities are financed partly by time loans, but in the main by demand loans obtained from banking institutions and secured by such securities as collateral.

To which should be added the process known as certification of brokers' checks—a practice not now so largely followed as formerly because of the greater use of the so-called "one-day loan."

How Brokers Obtain Credit.—It is of chief interest to the student of the Wall Street system to inquire into the methods employed by members of the Stock Exchange in obtaining their credit in the purchase and sale of securities for investment and speculation.

It has been seen that while the stock-broker executes orders for his customer on usually 10 per cent. margin, he is obliged to pay for the securities in full upon delivery. It would be manifestly impossible for any broker to do this without borrowing money from the banks. He has extended credit to his customer; he must himself get credit from the banks. For instance, a broker buys 5,000 shares of New York Central at 70, amounting to $350,000. But he executes the order for his customer on a margin of $35,000, so that he must pay the difference of $315,000, either out of his own capital or else borrow of the banks. Necessity compels him to go to the banks. He takes the 5,000 shares of the New York Central to the banks and

offers them as collateral for a loan. If he is wise, he already has an agreement with his customers enabling him to do this. The banks lend him $280,000 on the collateral at the prevailing rate of interest. With the $35,000 from his customer and $280,000 from the banks, the broker has $315,000, or $35,000 less than he must pay for the stock. This he would have to supply out of his own capital.

What is the net result? The customer is nominally the owner of 5,000 shares of stock, which he has, however, never seen, and which is actually in possession of banks whose very names he may not know. The interest of the banks in the stock represent 80 per cent. of its value; the broker's, 10 per cent.; and the customer's, 10 per cent. It does not follow that every transaction is exactly of these proportions of risk. The broker, in fact, may be able to obtain from the banks loans large enough to enable him, in connection with his customer's margin, to carry a transaction without the employment of much, if any, of his own capital. This example has been based upon the general rule that the margin demanded by the broker of his customer is usually 10 per cent., and the margin demanded by the banks of the broker is usually 20 per cent., the percentages in both cases varying in accordance with the character of the securities. The example serves to illustrate clearly the close intimacy existing between the money market and the stock market. The money-lenders are, in fact, the actual holders of the securities dealt in, and they have the largest interest at stake in the maintenance of values.

Certification.—But this is not the only connection between the banks and the stock-brokers. Let us return to the example already given. The broker has bought stock for which, on delivery, he must pay $350,000. Now, before he can get any loans from the banks on this stock he must have the stock in his possession, so as to be able to use

it as collateral for the loans. Before he can get it in his possession he must pay for it. His balance in the bank may not be more than $50,000. What is he to do?

Right here enters the new alliance between the banks and the brokers. It goes by the name of certification. The broker, in the case instanced, draws a check for $350,000 in payment for the stock. The check is sent to the bank where the broker keeps his account for certification. The cashier or paying teller indorses the check across its face, thus certifying not only that the signature is correct, but that the bank will pay the amount of the check on presentation and identification, or when it comes to it through the operations of the Clearing-House. But it has been said that the broker has a balance of only $50,000, and here the bank is certifying to his check for $350,000. That is what is called "overcertification," and it is another form of a great system of credits on which the transactions of Wall Street stand.

Overcertification.—Overcertification is in effect a temporary loan, and as employed in Stock Exchange transactions involves little risk. There are a number of Wall Street banks—not all—that do a regular business of certifying brokers' checks, but a large proportion of this business is done by the trust companies. A broker enters into a definite arrangement with one of the institutions on a basis something like this: The broker agrees to keep a daily cash balance at the bank of, say, $50,000; in return, the bank agrees to certify his checks to an amount, say, of $1,000,000. While this seems startling, the practice is in reality not dangerous. The immediate cause of the Seventh National Bank failure in 1901 was, indeed, an overcertification, but the real causes were deeper seated than that. There had been no other serious trouble caused by certifications for brokers in the twenty preceding years.

The banking institutions are very conservative in trans-

actions of this kind. They must know all about the broker, his character, good judgment, and business methods and standing. In other words, personal character is a valuable asset in Wall Street. A man's credit in the Exchange and in the banks depends largely upon it. Then the bank stipulates, in entering upon an agreement of this kind with the broker, that, while it will certify, say, to an amount of $1,000,000 on a net daily balance of $50,000, the broker must not frequently reach that limit. Moreover, he must make his deposits at the bank as frequently as he receives checks for payment for securities delivered. He can not wait until nearly three o'clock and then make one deposit for the day, but must deposit, it may be, six or seven times a day. The result is, that while the broker is receiving the benefit of large certifications in excess of his balance, at the same time he is at frequent intervals depositing other certified checks. Deposits and certifications thus go on simultaneously. The violation of the National bank law against overcertification is in most cases more technical than actual. Of course, as soon as the broker gets his stock and arranges his loan he is able to make every check good, and by his arrangement with the bank he is bound to maintain his average daily balance of $50,000, or whatever other amount may be agreed upon. The larger the average balance the larger the certification.

The Law.—It has been said that the practice of overcertification of brokers' checks is a technical violation of the National banking law. That law provides that it shall be unlawful for any officer, clerk, or agent of any National Banking Association to certify any check drawn upon the association, unless the person or company drawing the check has on deposit with the association, at the time such check is certified, an amount of money equal to the amount specified in such check.

Morning Loans.—But even the appearance of violation

of law may be open to criticism, and therefore the National banks are gradually withdrawing from this business, and other institutions are taking their place. The institutions also are beginning to adopt other systems, which have the merit of simplicity and freedom from possible illegality. Many of them are making morning loans to brokers of an amount that will cover their probable certification for the day. These loans are based on the "single named paper" of the broker—that is to say, his individual, unindorsed note. With such a loan the broker has to his credit a deposit at the bank sufficient for the day's probable business, and technical overcertification is avoided. The practical result is the same under either system. The latter has the merit of avoiding the appearance of evil.

In 1911 a leading state bank adopted still another method of protection in the certifying of brokers' checks. This is in the form of a trust agreement which a customer of the bank who desires the benefit of overcertification must sign. It is as follows:

> We hereby request the Bank from time to time to certify our checks which shall be payable to the order of some third person, persons or corporation in amounts in excess of our balance on deposit with the Bank at the time of certification in order that we may receive from the payee or payees of said checks certain bonds, notes, securities, merchandise or cash, or in order that we may procure the release of certain securities or merchandise held by the payee as collateral to a loan to us, and in consideration of such over-certification by the Bank of our checks we promise and agree to hold the said checks, and all securities, merchandise and cash received by us with the proceeds of any checks so certified as trustee for the Bank, to secure the amount of the certification granted by said bank and to deliver said securities, merchandise or cash so obtained to the Bank before the close of business on the day of certification of said checks.
>
> Any deficit or failure resulting from the non-performance of this trust shall constitute an indebtedness of ours to the Bank, the validity of which is hereby acknowledged.

This agreement shall be a continuing agreement and shall cover every over-certification of our checks and the securities to be acquired by the proceeds thereof, and it shall not be necessary to re-execute the same for each over-certification.

All the powers of sale and transfer of the property acquired by us through this trust agreement shall pass to and become the right of the Bank.

A broker who has his checks certified has necessarily no other credit hold on his bank. A merchant depositing in a bank has the privilege of having his paper discounted to a certain amount proportionate to his balance. Not so the broker. He must arrange his loan on a different basis.

Concerning the question of the certification of brokers' checks, William B. Ridgely, when Comptroller of the Currency, said:

The payments of stock delivered under the rules of the New York Stock Exchange are largely made by means of certified checks. The certificates are now made under forms carefully prepared by able lawyers strictly and technically in conformity with the law. Even if this practice were altogether stopped it would not have any very great effect on the Stock Exchange transactions and certainly would not stop stock gambling and speculation. It might cause some inconvenience and might make necessary the delivery of stock on some other system, but such a change would be made and the transactions proceed, even if the bank's methods of handling them had to be entirely revolutionized.

Amount of Certification.—The amount of certification required in the operations of the stock market is stupendous. On the deliveries made in the Stock Clearing-House transactions the certification actually required in 1901 was nearly $11,000,000,000. The Stock Clearing-House clears about 85 per cent. of all the sales of stocks. The remaining 15 per cent., as well as transactions in bonds, must therefore be taken into account in any estimate of total certification required. The bonds alone added at least another billion, and it is safe to say that the business of the New

York Stock Exchange, exclusively, in 1901, required a certification of $14,000,000,000, or an average of about $45,000,000 a day. This was over one-fifth the average daily clearances of the Bank Clearing-House.

It may be asked, What does a bank make by certifying brokers' checks? In the example given, the bank gains the use of $50,000, the required daily balance of the broker. But as the National bank is, by law, required to keep a reserve of 25 per cent., its net gain by this operation is the use of $37,500. Its profit is the interest it earns by the loaning of that amount. If it were not profitable the bank would not engage in the business.

Loans in Exchange.—Loans to brokers on stock and bond collateral constitute a large proportion of the business of many of the Wall Street banks. This business is carried on by a bank in direct contact with the stock-brokers and also through the agency of money-brokers who act as middlemen between lenders and borrowers. The bulk of the loans is made by the money-brokers and the rate for call-money is practically established on the floor of the Stock Exchange, at the "money post," where loan brokers offer funds and bids are received. The daily average call-money loans in 1919 were about $30,000,000.[1]

The banker comes to his office in the morning and ascertains exactly how his bank stands after going through the Clearing-House. If he finds he has a satisfactory surplus above the required legal reserve, he calls in one of the money-brokers and tells him to lend $500,000 or $1,000,000 or $5,000,000, as the case may be.

Besides the banks, the private bankers are large lenders of money to brokers. Even some mercantile concerns lend money on stock collateral. Railroad and insurance companies are at times large lenders. Russell Sage for many

[1] *Federal Reserve Bulletin,* April, 1920, "Call Money Rates," pp. 368-373.

years was a heavy lender on the Street, keeping a considerable share of his fortune in cash, for profitable employment in this way.

Rates of Interest.—Rates of interest had fallen greatly in the quarter century prior to 1914. Formerly, brokers, and merchants as well, were compelled to pay as much as 2 per cent. a month for credit; but as the country has grown richer, rates have declined, and call-money then only occasionally went above 6 per cent., which is the legal rate of interest in the state of New York, although loans on securities at higher rates are lawful under section 379 of the general business law which reads:

Sec. 379. In any case hereafter in which advances of money, repayable on demand, to any amount not less than five thousand dollars, are made upon warehouse receipts, bills of lading, certificates of stock, certificates of deposit, bills of exchange, bonds, or other negotiable instruments pledged as collateral security for such repayment, it shall be lawful to receive or to contract to receive and collect, as compensation for making such advances, any sum to be agreed upon in writing by the parties to such transaction.

It is a mistaken idea that the banks rejoice at a higher rate of interest. As a matter of fact, their profit is greater when the rate is 3 or 4 per cent. than when it is 25 per cent. For in the latter case corporations and large individual depositors will withdraw their money in order to make direct loans to borrowers, thus depleting the resources of the banks. But when the rate is 3 or 4 per cent. they will keep their money in the banks, which have then the profitable use of it. Some banking institutions make it a rule never to make call-loans at more than 6 per cent. In times, however, when a large commercial demand for credit coincides with a financial demand, and especially when there is a "flurry" in the market, rates of call-loans will advance to high figures. But in 1911 the rate never went above 6 per cent., reaching the highest figure

in the first week of January and the first week of December. When call-money rules at 1, 2 or 3 per cent., it is said to be easy; when it rises to 6, 7, or 8, it is very firm. In March, 1919, it ruled from 6 to 15 in New York and 6 to 10 in Boston. During a stringent period 25 is not exceptional.

Call-Loans.—Call-loans are payable on demand, and are still "the accepted indicator of money-market conditions." Practically, however, they are one-day loans: that is, subject to call the next day. In calling loans, banks are accustomed to give ample notice in writing in some such form as "Please send check for ———," unless the telephone is more convenient, and it usually is.

The whole machinery of the Street, from the sale of a stock in the Exchange, its clearance through the Stock Clearing-House, its delivery to the buyer, its deposit with a bank as security for a loan, is therefore of the simplest and most direct nature. Each party to every transaction obtains the utmost of protection with the least labor and the smallest possible amount of "red tape."

The bank's protection consists in its actual holding of the collateral, and either in a note signed by the borrower in each transaction or in a continuing agreement, which its customer signs, enabling the bank to sell the securities, without notice, in case the borrower neglects to respond to the call for payment of the loan. This agreement, which obviates the necessity of a new note each time a new loan is made, is generally in the following form:

Know all Men by these Presents, That the undersigned, in consideration of financial accommodations given, or to be given, or continued to the undersigned by THE THIRTIETH NATIONAL BANK OF THE CITY OF NEW YORK, hereby agree with the said Bank that whenever the undersigned shall become or remain, directly or contingently, indebted to the said Bank for money lent, or for money paid for the use or account of the undersigned, or for any overdraft or upon any indorsement, draft, guarantee or in any other

manner whatsoever, or upon any other claim, the said Bank shall then and thereafter have the following rights, in addition to those created by the circumstances from which such indebtedness may arise against the undersigned, or his, or their executors, administrators or assigns, namely:

1. All securities deposited by the undersigned with said Bank, as collateral to any such loan or indebtedness of the undersigned to said Bank, shall also be held by said Bank as security for any other liability of the undersigned to said Bank, whether then existing or thereafter contracted; and said Bank shall also have a lien upon any balance of the deposit account of the undersigned with said Bank existing from time to time, and upon all property of the undersigned of every description left with said Bank for safe keeping or otherwise, or coming to the hands of said Bank in any way, as security for any liability of the undersigned to said Bank now existing or hereafter contracted.

2. Said Bank shall at all times have the right to require from the undersigned that there shall be lodged with said Bank as security for all existing liabilities of the undersigned to said Bank, approved collateral securities to an amount satisfactory to said Bank; and upon the failure of the undersigned at all times to keep a margin of securities with said Bank for such liabilities of the undersigned, satisfactory to said Bank, or upon any failure in business or making of an insolvent assignment by the undersigned, then and in either event all liabilities of the undersigned, to said Bank, shall at the option of said Bank become immediately due and payable, notwithstanding any credit or time allowed to the undersigned by any instrument evidencing any of the said liabilities.

3. Upon the failure of the undersigned either to pay any indebtedness to said Bank when becoming or made due, or to keep up the margin of collateral securities above provided for, then and in either event said Bank may immediately without advertisement, and without notice to the undersigned, sell any of the securities held by it as against any or all of the liabilities of the undersigned, at private sale or Brokers' Board or otherwise, and apply the proceeds of such sale as far as needed toward the payment of any or all of such liabilities, together with interest and expenses of sale, holding the undersigned responsible for any deficiency remaining unpaid after such application. If any such sale be at Brokers' Board or at public auction, said Bank may itself be a purchaser at such sale free from any right or equity of redemption of the undersigned, such right and equity being hereby expressly waived and released. Upon

default as aforesaid, said Bank may also apply toward the payment of the said liabilities all balances of any deposit account of the undersigned with said Bank then existing.

It is further agreed that these presents constitute a continuing agreement, applying to any and all future as well as to existing transactions between the undersigned and said Bank.

....

Dated, New York, the..........day of..............19....

Time-Loans.—Most brokers seek to secure a certain proportion of their required line of credit on time. Thus time-loans are made. These are loans based on stock and bond collateral, but are not subject to call until the expiration of a certain specified number of days, when they must be paid or renewed. Formerly, time-loans were made by months, but now by days. Thus there are thirty-day, sixty-day, and ninety-day loans. The rates for time-loans are generally higher than for call, except in times of severe stringency in the money market, and banks are commonly very conservative in making such loans for long periods. The bank's deposits being subject to withdrawal on demand, it follows that it can lock up only a comparatively small part of its resources in the form of time-loans. The stock-broker, though paying more for his credit than he would on the call-loan basis, escapes the liability of having all his loans called at one time. A time-loan form is given on page 285.

Call-Money vs. Term Settlements.—At various times banking and Stock Exchange authorities have had under consideration the advisability of substituting term settlements for daily call-loans in stock clearings, as in European practice. The call-money system, it is alleged, is the source of undue strain on the money and credit resources when clearing settlements occur daily, and they prejudice the discount markets in trade channels. A Federal Reserve Board memorandum on "The New York Call-Money

Market,'' submitted to the United States Senate, says as to the facts:

It appears that over a period of years during the prewar period the volume of all money, both time and call, employed in the securities market was estimated at about $1,000,000,000, of which the average on call was about 60 per cent. and the average on time about 40 per cent., or a nominal value of call money of say $600,000,000. The daily turnover of all money, i. e., all loans called for payment, loans made in replacement thereof, and new money borrowed, ranged from $15,000,000 to $30,000,000, and averaged about $20,000,000. The daily turnover during the year 1919, however, ordinarily ranged from $25,000,000 to $40,000,000.

A recent study of this problem by Samuel F. Streit,[2] shows that in European practice term settlement loans on stock exchange collateral do not admit of substitution during the loan period, as is done here. There

the call money market is not based on Stock Exchange collateral but the bulk of the call loans is made on acceptances and special governmental obligations. . . The brokers know what their money requirements will be for the ensuing account a day or two in advance of the final settlement day of the current account. They are thus enabled to make their banking arrangements with the least disturbance; the discount market in the final analysis (rather than the call money market) acting as the regulator of excess demand or supply of Stock Exchange money.

The New York method, however, seems to clear a far larger proportion of total transactions, thus economizing money and credit.

Whereas, New York, with call-loans, clears 60 per cent. of daily transactions, leaving only 40 for settlement the day following, European methods leave 90 per cent. of

[2] ''Term Settlements'' (pamphlet): A Study of Clearing and Settling Security Contracts on Foreign Stock Exchanges, by S. F. Streit, Chairman, N. Y. Stock Exchange Committee. New York, 1920.

transactions uncleared for final settlement, or two and a half times as much as under daily settlement methods.

10-10-11-500

TIME LOAN.

$ ______

______ Phone ______

No. ______

Page ______ Date ______ 191 Due ______ 191 Rate ______

INTEREST CHARGED				INTEREST PAID			
MO.	AMOUNT	MO.	AMOUNT	DATE	CREDIT TO INT. ACCRUED	CREDIT TO INTEREST	PAID TO
JAN.		JULY					
FEB.		AUG.					
MAR.		SEPT.					
APR.		OCT.					
MAY		NOV.					
JUNE		DEC.					

ORIGINAL	SUB.	COLLATERAL	PRICE	VALUE

RECEIVED ALL COLLATERAL TO THE ABOVE MENTIONED LOAN

______

NEW YORK, ______ 191 PER ______

FORM OF RECORDING TIME LOAN

During the last ten years more and more dependence upon the telephone in call-loan transactions has been the

rule in the money market, it being much more easy, quick and satisfactory for both lender and borrower to make their arrangements in this way, both for entering into and terminating loans. No loans can be called or paid after 1 P. M. unless notice has been given before that time, and the broker has some time allowed him in which to make other arrangements for necessary credit.

The method of making call-loans has always been exceedingly easy, and the changes made during recent years have been mostly to make the process more simple and yet secure protection to both parties. If the bank agrees to make a loan and the broker accepts the rate offered, the latter presents his securities as collateral in a large envelope marked upon its face with all particulars of the loan, as shown on page 288. Unless a collateral agreement is on file at the bank where the loan is made, the broker signs a note on a form like that on page 287.

The rate in the above sample loan is given at 7½ per cent. simply to indicate that call-money may be legally loaned at a rate above 6 per cent. As has already been said, the rate rarely rises above the 6 per cent. point, and the 7½ was not the ruling rate at the date given.

The bank puts the envelope of securities received from the borrower and all papers in connection with the loan which are not to be returned to the borrower when loan is paid, into another and larger envelope like that on page 289.

By adding the loan card (see page 290) with messenger's receipt for collateral, the outside envelope is then complete and ready for filing.

The sample transaction here illustrated is as follows: The Thirtieth National Bank loans to S. E. Broker & Co. $100,000 on demand at 7½ per cent. interest, the broker securing the loan with stocks whose market price is $123,100. With this collateral he gives his note in which

the bank is authorized upon nonpayment of the loan when due, to sell the securities either at public or private sale; and the borrower also gives to the bank a lien for the amount of the note upon the title or interest of the borrower in any other property or securities in the keeping of the bank, and also upon the balance of the deposit account of the borrower in the bank.

$100,000.—

New York, FEB 1 1912 191

On Demand, for value received, the undersigned promise to pay to

THE THIRTIETH NATIONAL BANK OF THE CITY OF NEW YORK,

or Order, at its banking office in New York City, in funds current at the New York Clearing House, with interest from the date hereof at the rate of 7 1/2 per cent per annum (payable monthly on the first day of each month).

One hundred thousand Dollars;

having deposited with the said Bank as collateral security for the payment of this note and of any other liability or liabilities of the undersigned to the said Bank, due or to become due, and of any liability hereafter contracted or existing, the following property, viz.: SECURITIES AS PER ENVELOPE OF THIS DATE

of the estimated market value of $123,100.— ; the undersigned also hereby giving to the said Bank a lien for the amount of all the aforesaid liabilities upon the title or interest of the undersigned in any other property or securities at any time given unto, or left in or in any way come into the possession or custody of, the said Bank for safe keeping or otherwise, and also upon the balance of the deposit account of the undersigned with the said Bank existing from time to time.

In case the securities at any time pledged for any of the aforesaid liabilities should decline in market value, the undersigned agree , without notice or demand, to deposit forthwith with the said Bank additional securities to its satisfaction, and in case of failure to do so, this note and all other liabilities of the undersigned to the said Bank shall at once become due and payable without demand of payment thereof, and the said Bank may immediately sell and apply the said securities in manner and with the effect hereinafter provided.

The undersigned agree that in the event of the insolvency of the undersigned or of any guarantor or indorser of this note all the aforesaid liabilities shall, at the option of the said Bank, become immediately due without demand of payment thereof.

The said Bank is hereby authorized, upon the non payment of any of the said liabilities when due or made due, to sell, assign and deliver the whole of the said securities, or any part thereof, or any substitutes therefor or additions thereto, or any other securities or property of the undersigned, or in which the undersigned ha any right or interest, given unto, or left in or in any way come into the possession or custody of, the said Bank, at any Exchange or at public or private sale either for cash or on credit or for future delivery at the option of the said Bank, without either advertisement or notice, which are hereby expressly waived. If such securities or property are so sold at any Exchange or at public sale the said Bank may itself purchase the whole or any part thereof free from any right of redemption on the part of the undersigned, the same being hereby waived and released.

In case of sale made for any cause, after deducting all costs or expenses of collection, sale or delivery, the said Bank may apply the residue of the proceeds to pay either one or more of all the aforesaid liabilities whether then due or not as it shall deem proper, making proper rebate for interest on liabilities not then due and returning the overplus if any to the undersigned, the undersigned agreeing to be and remain liable to the said Bank for any deficiency arising upon such sale or sales.

S. E. Broker & Co.

Note Given by Broker

The bank has a card system of its own by which it records the various transactions with each customer, as for instance that shown on page 291. This enables the bank to see at a glance the total amount of the accommodation given to each borrower.

DEMAND LOAN

TO

S. E. BROKER & CO.

BY

Thirtieth National Bank.

AMOUNT $ 100.000.— RATE 7½

DATE FEB 1 1912

SECURITIES

200	N.Y. Central	110	22	000
100	Atchison		10	5
100	Great Northern Pfd.		12	8
100	Ches & Ohio		7	
200	Penna. (½)	122	12	2
300	Steel	60	18	
100	Consolidated Gas		13	8
100	Amer Telephone & Tele.		13	9
100	Amer Smelters		6	8
50	Amalgamated Copper	60	3	
100	Pacific Mail		3	1
			123	100

RECORD OF DEMAND LOAN

THE THIRTIETH NATIONAL BANK
OF THE CITY OF NEW YORK

No. 1729 Page 243

S. E. Broker & Co

Date FEB 1 1912 191

Due 191

AMOUNT LOANED				AMOUNT PAID			
$	100	000		$			

COLLATERALS

THE BANK'S CALL-LOAN ENVELOPE

3-16-11-9000 863

Loan No. 1729

Page No. 243

The Thirtieth National Bank
OF THE CITY OF NEW YORK

Feb 1st 1912

Demand Loan of $100,000.—

To S. E. Broker & Co.

			COLLATERALS	Price	Value	
		200	N. Y. Central		22	
		~~100~~	Atchison			
		100	Great Northern Pfd		12	8
		~~100~~	Ches & Ohio			
		200	Penna (½)	122	12	2
		300	Steel	60	18	
		100	Consolidated Gas		13	8
		100	American Telephone		13	9
		100	Amer Smelters		6	8
		50	Amalgamated Copper		3	
		100	Pacific Mail 123100 –		3	1
		300	Iowa Central Pfd	27	8	1
		100	Amer. Can Pfd		9	
					122	7

MAR 29 1912

New York,

Received all the collaterals to the within mentioned Loan.

THE LOAN CARD

Substitutions.—It frequently happens that the borrower wishes to substitute one stock for another in the collateral for the loan, and the bank will accommodate him provided the security for the loan is not materially weakened. For the broker in the course of his business may be required to sell one of the stocks and make delivery. For instance in the loan indicated the firm desires to substitute new stocks for others to be withdrawn, and he therefore sends to the bank a letter like that on page 292.

LOANS TO S. E. Broker & Co

BOOK	PAGE	DATE		AMOUNT		RATE WHEN MADE	RATE WHEN PAID	PAID		REMARKS
23	149	1910 Jan	27	200	000	6	5	Feb	6	All bonds
	180	1911 Jan	4	50	000	5½	1½			
	217	July	7	100	000	2¼	1½	Sept	9	Called
	222	Aug	19	100	000	2	1½			
	243	1912 Feb	1	100	000	7½	3	Mch	29	

THE BANK'S LOAN CARD

In this case 100 shares of Atchison and 100 shares of Chesapeake and Ohio are withdrawn and 300 Iowa Central preferred and 100 American preferred are substituted. By this substitution the security will be shown upon analysis to have been somewhat reduced in quality. The original loan was on a 16-point basis (therefore less than the technical 20 per cent. basis). The new loan is on a

S. E. BROKER & Co.,
79 BROADWAY
NEW YORK FEB 7 1912

Thirtieth National Bank

GENTLEMEN:

FROM THE COLLATERAL TO OUR LOAN OF $100.000. DATED Feb. 1st PLEASE DELIVER TO BEARER

100 Atchison	10.500
100 Ches. & Ohio	7.
	17.500

IN EXCHANGE FOR

300 Iowa Cent. Pfd. 27	8.100
100 Amer. Can Pfd	9.
	17.100

VERY TRULY YOURS

S E Broker & Co.

REQUEST FOR SUBSTITUTION

13.7 per cent. basis. Comparison of the average price as between the original loan and the loan with substituted stocks shows that the 1450 shares in the former valued at $123,100 would average 85, while the 1650 shares in the substituted collateral valued at $122,700 averaged 74. In the original loan one-half of the securities were railroads which are usually preferred. In the substituted loans the railroads fell below that amount. The substitution slip is filed in the bank's big loan envelope.

Frequently there are several substitutions in one day and in the stock panic of May 9, 1910, there were eleven substitutions in one loan.

Scrutinizing Collateral.—In making loans the bank scrutinizes the collateral closely. The securities must be strictly good delivery according to the rules of the Exchange. Stocks and bonds for which there is not a constant market are generally not acceptable. The most approved collateral, as has been indicated, are the stocks and bonds of standard railroad companies, listed at the Exchange and having a high standing. There are also industrial companies whose stocks are equally acceptable as loan collateral. But, formerly, most banks discriminated against industrials to this extent: that they generally made no loan on industrial collateral alone, or if they did, they charged a much higher rate of interest. When industrial stocks were accepted it was generally required that there must be railroad or other approved securities with them. It is needless to say that Government bonds always rank as the very highest class of collateral, and the banks require no margin on such security. If the market value of the securities deposited for a loan declines, the banks are obliged to call for more collateral in order to keep the required margin good.

Change in Rate.—The bank is frequently obliged to mark up the rate for the call-loan. Changes in the rate,

THE THIRTIETH NATIONAL BANK

OF THE CITY OF NEW YORK

NEW YORK, *Feb. 2, 1912.*

S. E. Broker & Co.,

DEAR SIRS:

If agreeable, we mark your loan

$*100,000* dated *Feb. 1, 1912.*

$ dated

dated

as renewed at *6* per cent. from this date.

Please confirm our action by stamping perforated slip, which kindly return to us.

Yours respectfully,

WILFRED HONE,

Cashier.

We mark rate ot interest on your Loan *6* per cent. from this date.

per

Date *Feb. 2, 1912.*

NOTICE OF CHANGE IN RATE OF INTEREST

whether up or down, are usually made over the 'phone, but if it is advisable to secure confirmation the form on page 294 may be used, and in this illustration a reduction of the rate is noted.

Legality.—It has been said that when a broker pledges as collateral for a bank loan the securities which he has bought for a customer, and which the broker holds as security for a loan made to the customer, that is rehypothecation. But this is the universal practice of the Street, to which every operator in stocks tacitly agrees. The illegality of the operation can be avoided by an agreement between brokers and customers. The law on this subject was expounded a few years ago by Justice Williams in the Appellate Division of the New York Supreme Court. He held practically that when securities carried on margin for a customer were pledged with other securities for loan for a greater amount than the indebtedness of the customer on account of the purchase of securities, and without the broker retaining in his possession other securities of a like kind and amount, that was conversion by the broker of the customer's property. Hence the necessity for an understanding between brokers and customers on this subject. If a customer will not agree to this absolutely necessary use of his securities, he might as well keep out of the stock market.

As was shown in a preceding chapter, the loans secured by stocks and bonds amount to fully one-third of the total outstanding credits in the United States. Whether this constitutes the most useful form of credit is a matter of some dispute, but the security loan is undoubtedly, taking everything into consideration, the safest form of credit. Its advantages are:

Advantages of Security Loan.—The ease by which securities can be made the basis of loans, the mere taking of an envelope containing the collateral to the lender, after

an arrangement made over the 'phone as to amount of principal and rate of interest, being all that is needful; while in the case of default there is a market at hand in which the securities may be sold by the lender to realize the principal of the loan.

Its chief defect is that the security loan largely eliminates the element of character from the contract entered into. The personal standing of the borrower is far less a factor than the market price of the securities he offers as collateral.

Three Classes of Credit.—There are three main classes of credit:

1. That based upon the personal and business standing of the borrower; 2. That based upon actual commodities such as cotton, grain, coffee, and the like, or on warehouse receipts or bills of lading representing the same; 3. That based upon stocks and bonds.

Each has its peculiar merits and demerits. The first two have a more direct relation to the movement of commerce than the security loan, and yet the latter, like the two others, has its proper place in the credit market and performs a useful function.

Loans based upon personal or firm credit require the elaborate machinery of the modern credit department with all its facilities for ascertaining every essential fact regarding the borrower and his business. But the regulations imposed by the lenders have the inestimable benefit of enforcing higher personal and financial habits; and no more useful contribution has been made to bank credits in recent years than the rule requiring borrowers to make and sign statements regarding their business which are minute and searching in the information which they exact. Loans on commodities and merchandise are subject to peculiar difficulties and perils, but are fundamental "to the commercial supremacy of the country, and handled

with intelligence and proper care, can be made eminently safe." [3]

Checking Loan Excesses.—Raising the discount or the call-money rates is not always an advisable means of checking such tendencies as over-extension of credits. Sudden or too drastic advances in interest rates run the risk of doing injury to normal commercial operations or of imposing extra expenses on governmental borrowings or financing at the time. Consequently, comprehensive expansion of credits has often to be dealt with by other more general methods. A warning from the Federal Reserve Board is one way. At several times during recent years the Reserve authorities have done this when speculation in general was causing overstrain on reserves. But Wall Street has usually been the first to respond to correct an unsound situation. In November, 1919, when the 73 New York City banks reporting had $557,000,000 of loans, and the district's reserve was down to 40, as against 46.8 for the whole system, prompt liquidation of speculative accounts within the next few months reduced loans to $357,000,000, or by $200,000,000. Yet during the 15 months from the Armistice of November 11, 1918, to March, 1920, the rest of the country had expanded its loans by the colossal sum of $5,200,000,000. The whole country was speculating unduly on inflated credits, in which Wall Street, as shown by its stationary loans, had for the later months especially taken little part.

REFERENCES

Those interested in this branch of the subject may consult Dr. Jacob H. Hollander's "Bank Loans and Stock Exchange Speculation," a pamphlet issued by the National Monetary Commission, 1911.

[3] *Journal of American Bankers' Association,* February, 1912.

CHAPTER XX

THE BANK STATEMENT AND THE MOVEMENT OF MONEY

Maurice Patron spoke prophetically when he said:

> The interesting evolution of means of exchange which we are witnessing and which is familiar to everybody, seems to be leading us, after the well-defined periods of barter and money, to a system of mere clearing of balances. All exchange operations would then be settled by simple book transfers. Coin, thus reduced to the condition of money on account, would cease to play any real part. Economists are even thinking of a return to barter, which would complete the cycle, bringing us back to the original state after thousands of years and combinations of all kinds. Such would be the course of this evolution.

The important changes in the bank statement make it a more complete exhibit than ever of the banking conditions of New York. Even the weekly statement of the Bank of England scarcely exercises a more potent influence on the money markets of the world than does the weekly statement of the New York Bank Clearing-House combined with that of the Federal Reserve Bank and Board.

The movement of money in and out of the banking institutions, and the volume of their deposits and loans, are closely watched, not only by every stock-broker and stock-operator, but by every man of large affairs who is dependent upon the stability of credit for the security of his business, and upon the rate of money for his profits.

All lines of business are sensitive to changes in the money rate, but the stock market is peculiarly so on account of its intense mobility. It is true that sometimes the stock market asserts its independence and advances in spite of high rates for loans, but, as a general rule,

any shortage in the supply of credit checks stock speculation and produces declines in prices. Any sudden or severe contraction of credits will produce a "flurry" in the market—that is, a sharp break in prices, attended with more or less excitement. If the contraction is so extreme as to make it impossible to arrange loans, large blocks of securities, which cannot be carried, are dumped on the market for what they will bring, and the Street then has a panic. Wall Street, therefore, scrutinizes the bank statement with the utmost care.

This statement is issued by the Clearing-House once a week, on Saturday, at noon. If Saturday is a holiday, it is issued on Friday, at three o'clock. It gives the condition of all the members of the Federal Reserve Bank and a few leading non-members, their capital, net profits, legal reserves, their loans, net and time deposits, cash holdings, and their circulation.

Averages.—Formerly the statement presented only an exhibit of the average conditions of the banks, but now to this exhibit of averages is added a statement of actual conditions on the day of the issue. The actual figures are, however, only for the condition of the banks as a whole; the exhibit for each individual bank is on a system of averages. For instance, the bank ascertains what its outstanding loans were on each day of the week, and reports the average of these items for the week to the Clearing-House. It does the same with its deposits and cash holdings. The average for the week may be quite different from the actual figures for the last day of the week. The banks' actual condition might be better or worse. It follows that if a large amount of currency should be received on Friday, it would count only for one day in the week's average of cash holdings, and the actual condition of the bank on Saturday would be better than the average statement indicated. If there had been a large withdrawal

of gold on Friday, for export, the loss would count only for one day in the week's average, which would make the statement appear better than actual conditions. A striking illustration of the effect of the law of averages upon the bank statement was given in September, 1902. The statement of September 20 reported a loss in cash of $7,300,000, while the actual loss, so far as it could be estimated, was only $3,600,000. The statement of September 27, on the other hand, reported a gain in cash of $1,790,000, while the apparent loss was $4,000,000. The former statement reported a deficit in reserves; the latter a surplus.

The system of averages has the advantage that it removes at once the temptation and the possibility of "window dressing."[1] If a bank reports its actual condition on a given day, it might take pains to make the showing better than the actual facts warrant, as, for instance, by borrowing money from non-member trust companies to inflate its exhibit of reserves. This is "window dressing." This, too, is now a thing of the past. But while the average system possesses this advantage, it has the important disadvantage, that though it is a fair statement for a week, it is often an erroneous statement for the day it is issued. The Clearing-House, therefore, has changed the form of its weekly statement, by publishing the average figures for the week of each "individual" bank, and adding thereto the actual figures for "all" the banks on the day of issue. In this way it secures the advantages of both systems of reporting conditions.

[1] "The expression 'window dressing' in its application to financial institutions had its origin in Great Britain. It arose out of the fact that the joint-stock banks were not accustomed to keep cash reserves of any considerable size, but made it a practice when it came time to render a public return to temporarily augment their cash with a view to making it appear that they habitually carried considerable reserve."—From the *Commercial and Financial Chronicle,* Jan. 27, 1912.

The following is the statement of averages issued on Saturday, June 12, 1920, for 53 banks and trust companies, 48 of which were members and 5 non-members of the Federal Reserve Bank of New York.

The column showing circulation is omitted. The member banks were by the original Act required to hold 18 per cent. of demand and 5 per cent. of time deposits as reserve, partly in their own vaults and partly in the district reserve bank; but since June 21, 1917, member reserves are held entirely in the Reserve Bank. These banks had a circulation of $34,933,000, including 28 national banks.

Watching for Statement.—At noon on Saturday every Wall Street man watches the tape for the reports from the Clearing-House and the Reserve Bank. At first comes a mere summary of the statement, and an account of the gains and losses as compared with the preceding week. For example, taking the statement of June 12, 1920, the first announcement was that the legal reserve had decreased $6,814,000; loans had decreased $13,399,000; cash in vaults had increased $3,978,000; net demand deposits had decreased $62,812,000; time deposits increased $567,000, and circulation had decreased $4,000.

This, for the time being, is sufficient for the Street. But the banker and broker and merchant will desire, especially in critical periods, to know more of the situation, and so will study the detailed statement, which is given out soon after the summary, but which is not sent over the tape. The detailed statement gives the average condition of each bank, but requires analysis for a complete understanding.

Analyzing the Statement.—To read the bank statement intelligently one must study it, first as a whole, and secondly in its various parts. In the statement given it appears that while there was a slight contraction in credits during the week, amounting to only $13,399,000; there was at the

STATEMENT OF THE NEW YORK CLEARING-HOUSE

Average Figures for Week Ended Saturday, June 12, 1920

Banks	Capital (May 4) (1)	Net Profits (2)	Loans, Discts., Investments, &c. (3)	Cash in Vaults (4)	Reserves with Legal Depos. (5)	Net demand Deposits (6)	Time Deposits (7)
Bank of N. Y., N. B. A.	$2,000,000	$7,040,700	$51,656,000	$724,000	$5,291,000	$34,050,000	$4,385,000
Bank of the Manhattan Co.	5,000,000	16,146,500	137,427,000	3,269,000	13,333,000	98,746,000	10,720,000
Mech. & Metals National	9,000,000	13,679,300	178,397,000	9,662,000	18,749,000	146,302,000	4,294,000
Bank of America	5,500,000	6,051,000	58,308,000	2,271,000	7,805,000	53,151,000	1,765,000
National City	25,000,000	58,875,200	571,197,000	13,942,000	73,257,000	(a) 628,577,000	37,862,000
Chemical National	4,500,000	14,400,000	165,989,000	1,793,000	15,346,000	114,673,000	1,831,000
Atlantic National	1,000,000	1,069,700	20,058,000	557,000	2,461,000	18,093,000	580,000
Nat. Butchers & Drovers	300,000	162,500	5,077,000	109,000	579,000	3,869,000	....
American Exchange National	5,000,000	6,483,700	126,460,000	1,534,000	12,897,000	94,022,000	5,772,000
National Bank of Commerce	25,000,000	31,040,900	339,445,000	2,881,000	34,997,000	265,906,000	6,557,000
Pacific Bank	1,000,000	1,697,400	24,969,000	1,360,000	3,477,000	24,212,000	21,000
Chatham & Phenix National	7,000,000	7,272,400	127,240,000	5,466,000	15,039,000	108,546,000	13,014,000
Hanover National	3,000,000	19,529,600	130,893,000	4,592,000	18,019,000	132,163,000	....
Metropolitan Bank	2,000,000	2,910,400	33,650,000	2,021,000	5,858,000	37,736,000	....
Corn Exchange	4,620,000	8,776,900	145,925,000	6,986,000	20,409,000	148,759,000	9,333,000
Importers & Traders National	1,500,000	8,651,800	34,769,000	819,000	3,585,000	27,349,000	44,000
National Park	5,000,000	21,582,900	212,405,000	1,399,000	21,404,000	163,609,000	3,299,000
East River National	1,000,000	796,400	11,795,000	412,000	1,514,000	11,228,000	877,000
Second National	1,000,000	4,450,000	22,995,000	955,000	2,773,000	19,071,000	100,000
First National	10,000,000	35,505,500	285,084,000	1,071,000	22,287,000	169,392,000	8,202,000
Irving National	9,000,000	10,340,400	198,825,000	6,552,000	25,572,000	194,249,000	2,122,000
N. Y. County National	1,000,000	384,200	14,990,000	918,000	1,705,000	13,312,000	977,000
Continental	1,000,000	731,800	8,119,000	137,000	932,000	6,361,000	91,000
Chase National	15,000,000	22,227,300	391,403,000	5,583,000	42,717,000	297,071,000	13,728,000
Fifth Avenue	500,000	2,348,500	20,528,000	1,057,000	3,052,000	21,088,000	....
Commercial Exchange	200,000	967,900	7,644,000	569,000	1,128,000	7,522,000	....
Commonwealth Bank	400,000	795,700	9,071,000	473,000	1,249,000	9,209,000	....
Lincoln National	1,000,000	2,089,300	18,233,000	950,000	2,426,000	18,009,000	74,000
Garfield National	1,000,000	1,478,200	15,428,000	548,000	2,193,000	15,210,000	145,000
Fifth National	1,000,000	620,500	15,260,000	333,000	1,730,000	13,174,000	525,000

Banks	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Seaboard National	$1,000,000	$4,395,800	$50,001,000	$1,037,000	$6,046,000	$45,257,000	$503,000
Liberty National	5,000,000	7,161,100	87,189,000	469,000	10,482,000	79,420,000	3,084,000
N. Y. Produce Exchange Nat.	1,000,000	1,456,800	26,509,000	2,377,000	4,366,000	30,221,000	63,000
Coal & Iron National	1,500,000	1,580,100	20,958,000	861,000	2,281,000	15,977,000	600,000
Union Exchange National	1,000,000	1,571,800	20,867,000	554,000	2,819,000	20,650,000	464,000
Brooklyn Trust	1,500,000	2,504,200	41,561,000	799,000	4,103,000	29,467,000	5,295,000
Bankers Trust	20,000,000	18,547,600	283,266,000	929,000	32,598,000	246,623,000	15,660,000
U. S. Mortgage & Trust	2,000,000	4,803,800	61,748,000	700,000	7,397,000	52,207,000	8,041,000
Guaranty Trust	25,000,000	31,757,700	539,388,000	2,747,000	53,789,000	(b) 508,315,000	26,533,000
Fidelity Trust	1,000,000	1,367,300	13,177,000	445,000	1,506,000	11,675,000	391,000
Columbia Trust	5,000,000	7,453,100	81,602,000	1,263,000	10,500,000	77,905,000	6,164,000
People's Trust	1,500,000	1,900,000	34,405,000	1,112,000	3,414,000	33,232,000	2,064,000
New York Trust	3,000,000	11,256,100	90,305,000	474,000	8,800,000	64,125,000	1,907,000
Lincoln Trust	1,000,000	925,500	24,123,000	562,000	3,553,000	25,192,000	949,000
Metropolitan Trust	2,000,000	3,355,200	38,071,000	610,000	3,909,000	28,204,000	1,318,000
Nassau Nat. Bank, B'klyn	1,000,000	1,345,800	18,127,000	573,000	1,574,000	14,401,000	1,051,000
Farmers' Loan & Trust	5,000,000	10,633,900	118,466,000	4,264,000	14,215,000	(c) 125,955,000	11,529,000
Columbia Bank	2,000,000	1,560,000	23,769,000	806,000	2,995,000	22,022,000	231,000
Total	$228,020,000	$421,682,800	$4,956,772,000	$99,525,000	$556,131,000	‡$4,053,234,000	$212,165,000
STATE BANKS NOT MEMBERS OF FEDERAL RESERVE BANK							
Greenwich	$1,000,000	$1,678,800	$18,985,000	$2,586,000	$1,637,000	$19,649,000	....
Bowery	250,000	839,500	5,536,000	685,000	329,000	5,476,000	....
State	2,000,000	1,508,000	69,392,000	3,645,000	2,065,000	30,678,000	$36,623,000
Total	$3,250,000	$4,026,300	$93,913,000	$6,916,000	$4,031,000	$55,803,000	$36,623,000
TRUST COMPANIES NOT MEMBERS OF FEDERAL RESERVE BANK							
Title Guarantee & Trust	$5,000,000	$12,906,600	$44,898,000	$1,043,000	$3,465,000	$29,846,000	$999,000
Lawyers Title & Trust	4,000,000	5,994,500	26,388,000	996,000	1,526,000	16,510,000	407,000
Total	$9,000,000	$18,901,100	$71,286,000	$2,039,000	$4,991,000	$46,356,000	$1,406,000
Grand total	240,270,000	444,610,200	5,121,971,000	108,480,000	565,153,000	†4,155,393,000	250,194,000
Change	....	....	−13,399,000	+3,978,000	−6,814,000	−62,812,000	+567,000

(a) Includes deposits in foreign branches, $146,380,000; as reserve, $51,504,000.
(b) In foreign branches, $105,219,000; as reserve, $11,255,000.
(c) In foreign branches, $20,674,000; as reserve, $2,230,000.

same time $3,978,000 gained in cash in vaults, so that in spite of this gain in "till money," the institutions held $6,814,000 less in legal reserve than the week before, and lost $62,812,000 in demand deposits, and were less prepared to extend credits by about $78,500,000.

The Reserves Old and New.—The bank statement will also be examined to ascertain the condition of each of the big banks, to learn which of them have increased or reduced their loans, which have gained or lost in cash, and which are above or below their legal reserves.[2] To find the reserve before the Federal Reserve Act we divided deposits by 4, and the difference between this and its specie and legal tenders added together showed whether it was above or below the legal requirement. The statement as of January 13, 1912, showed that the National City Bank reserves amounted to 25.5 per cent. of their deposits, the National Bank of Commerce 30.2, the First National 25, the National Park 26.7, the Chase National 26.2, the Hanover National 29.1 and the Fourth National 26.9. The requirement for each of these banks is 25 per cent. Such an examination as this revealed the ability of each of the institutions for further expansion of loans, under the earlier national banking system.

Important Items.—The four most important items in the bank statement under that system were:

1. The cash holdings which were ascertained by adding the specie and legal tenders. The cash holdings ordinarily constituted the first means of meeting demands on the banks; but their relative importance is much minimized under the Federal Reserve system.

2. The surplus reserve which was the excess held above the amount of cash required by law.

3. The outstanding loans—a second line of reserves.

4. The net deposits, which were the gross deposits (not

[2] Now kept with Federal Reserve Bank as legal depository.

counting the deposits of the United States Government, but adding the unpaid dividends) less exchanges for the Clearing-House, amounts due from other banks for collection, notes of other banks and checks on non-clearing institutions in this city.

Federal Reserve Balances.—Widely different is the Federal Reserve requirement of the banks based on location and population. The Act specifies that every bank, banking association or trust company having membership in any Federal reserve bank shall establish and maintain reserve balances with such bank as follows:

(*a*) If not in a reserve or central reserve city, an actual net balance equal to not less than seven (7) per cent. of the aggregate amount of its demand deposits and three (3) per cent. of its time deposits.

(*b*) If in a reserve city, not less than ten (10) per cent. of its demand deposits and three (3) per cent. of its time deposits.

(*c*) If in a central reserve city, not less than thirteen (13) per cent. of demand deposits and three (3) of its time deposits.

In estimating the required balances, the "net difference of amounts due to and from other banks shall be taken as the basis for ascertaining the deposits against which required balances shall be determined." When this reserve is drawn upon, neither loans or dividends may be issued until said reserve is replenished.

In the New York State Banking Act reserves are calculated on aggregate demand deposits, at eighteen (18) per cent. of such deposits for banks in cities of two million of population or over, twelve (12) per cent. of which at least shall be kept as reserve on hand; fifteen (15) per cent. if located in a city of between one and two million of population, keeping at least ten (10) per cent. on hand; and twelve (12) per cent., if located elsewhere in the State, keeping at

ACTUAL CONDITION AT OPENING OF BUSINESS, JUNE 12, 1920, NEW YORK CLEARING-HOUSE STATEMENT

Members			Loans, etc.	Cash in Vaults	Legal Res.	Demand Deps.	Time Deps.
Members Federal Reserve Bank	....	....	$4,948,908,000	$94,773,000	$574,191,000	‡$4,083,142,000	$211,876,000
State banks not in Reserve Bank	....	....	93,829,000	6,796,000	4,167,000	55,675,000	36,681,000
Trust cos. not in Reserve Bank	....	....	71,347,000	1,985,000	4,977,000	45,539,000	1,313,000
Grand total	....	....	$5,114,084,000	$103,554,000	$583,335,000	†$4,184,356,000	$249,870,000
Change	....	....	−15,264,000	−2,633,000	+8,236,000	−9,110,000	−1,544,000

Bills payable, rediscounts, acceptances, and other liabilities, $1,073,900,000 in average statement; $1,056,687,000 in actual statement.
†United States deposits deducted, $22,889,000 in average statement and $22,974,000 in actual statement.
‡Deposits in foreign branches not included.

NEW YORK AND FEDERAL RESERVE BANK STATEMENTS

RESOURCES	N. Y. Bank—June 12			F. R. Board—12 Banks–June 11
	Last Week	Prev. Week	Year Ago	Last Week, June 12
Gold and gold certificates	$82,219,508.62	$29,215,000	$260,047,000	$168,193,000
Gold settlement fund, Federal Reserve Board	106,861,462.13	163,300,000	168,200,000	431,905,000
Gold with foreign agencies	40,931,550.31	40,932,000	....	111,531,000
Total gold held by bank	$230,012,521.06	$223,447,000	$428,247,000	$711,620,000
Gold with Federal Reserve agent	284,531,568.46	285,182,000	284,281,000	1,103,751,000
Gold redemption fund	33,861,700.00	33,993,000	24,829,000	149,648,000
Total gold reserve	$548,405,789.52	$542,622,000	$737,357,000	$1,965,058,000
Legal tender notes, silver, &c	105,195,269.95	105,366,000	51,808,000	137,533,000
Total reserves	$653,601,059.47	$647,988,000	$789,165,000	$2,102,591,000
Bills discounted: Secured by Government war obligations: For members	529,827,305.99	513,070,000	630,112,000	1,440,931,000
For other Federal Reserve Banks	31,793,000.00	48,075,000	....	1,082,019,000

Total bills discounted	$561,620,305.99	$561,145,000	$630,112,000	$2,522,950,000
All other: For members	232,864,829.06	248,720,000	30,644,000	403,896,000
For other Federal Reserve Banks	28,398,918.27	30,469,000	....	....
	$261,263,747.33	$279,189,000	$30,644,000	....
Bills bought in open market	183,993,830.16	179,008,000	71,992,000	....
Total bills on hand	$1,006,877,883.48	$1,019,342,000	$732,748,000	$2,926,846,000
United States Government bonds	1,456,900.00	1,457,000	1,302,000	26,796,000
United States Victory notes	50,000.00	50,000	50,000	69,000
United States certificates of indebtedness	76,726,500.00	72,876,000	66,276,000	280,108,000
Total earning assets	$1,085,111,283.48	$1,093,725,000	$800,376,000	$3,233,819,000
Bank premises	3,500,963.36	3,500,000	3,782,000	13,111,000
Five per cent redemption fund against Federal Reserve Bank notes	3,072,570.00	2,890,000	1,734,000	11,794,000
Uncollected items and other deductions from gross deposits	146,748,781.19	167,015,000	199,236,000	772,903,000
All other resources	1,176,571.69	975,000	2,807,000	5,751,000
Total resources	$1,893,211,229.19	$1,916,093,000	$1,797,100,000	$6,139,969,000
LIABILITIES				
Capital paid in	$24,687,450.00	$24,667,000	$21,384,000	$94,284,000
Surplus	45,081,932.63	45,082,000	21,117,000	120,120,000
Government deposits	980,149.70	9,322,000	22,642,000	21,830,000
Due to members—reserve account	763,524,472.80	753,272,000	676,417,000	1,870,240,000
Deferred availability items	105,515,841.69	114,945,000	156,252,000	574,684,000
Other deposits, including foreign Government credits	37,287,356.63	43,504,000	114,188,000	86,282,000
Total gross deposits	$907,307,820.82	$921,043,000	$969,499,000	$2,553,036,000
Federal Reserve notes in actual circulation	851,001,876.00	861,807,000	736,288,000	3,112,205,000
Federal Reserve Bank notes in circulation, net liability	37,812,400.00	57,440,000	34,490,000	181,382,000
All other liabilities	27,339,749.74	26,054,000	14,322,000	78,942,000
Total liabilities	$1,893,211,229.19	$1,916,093,000	$1,797,100,000	$6,139,969,000
Ratio of total reserves to deposit and Federal Reserve note liabilities combined	40.6%	40.1%	52.3%	43.0%
Ratio of gold reserves to F. R. notes in circulation after deducting 35 per cent against deposit liabilities	....	....	70.5%	47.5%
Ratio of reserves to net deposits after deducting 40 per cent gold reserves against F. R. notes in circulation	41.2%	40.2%	....	.....
Contingent liability on bills purchased for foreign correspondents	$16,216,731.32	$16,215,516.33	....	....

least four (4) per cent. on hand. The New York Clearing-House requires every member State bank and trust company to keep the same reserves as the Reserve Act requires.

Actual Figures.—The Clearing-House statement gives the exhibit of averages already shown on pages 302-3; a statement of actual figures for the day of issue is given also, followed by the Federal Reserve statement, on pages 306-7.

More Complete Publicity.—But even the bank statement does not give the exhibit for all the banking institutions in New York. While all the important banks and trust companies are members, there are a number of State Banks and Trust Companies that are not members, and of course their returns do not figure in the statement. But after the panic of 1907, a determined effort was made to bring about a more complete banking publicity, and this has been accomplished, first by admitting the principal trust companies to membership, and second by an arrangement with the State Banking Department under which it reports to the Clearing-House, every Saturday, the total deposits, loans and reserves of the State Banks and Trust Companies in Greater New York which are not members of the Clearing-House. By combining these figures with the Clearing-House statement of actual condition we get an exhibit of banking conditions in Greater New York that includes all institutions. Such an exhibit for January 13, 1912, and June 12, 1920, was as follows:

	January 13, 1912	June 12, 1920
Loans, etc.	$2,531,983,600	$5,114,084,000
Cash in vaults	518,501,000	103,554,000
Net deposits	2,416,299,800	4,184,356,000

Loans.—Every analyzer of a bank statement studies the item of loans. This shows whether the banks are expanding or contracting. Contraction is, of course, dreaded by the Street, because it involves the calling of

loans and an advance in the rates of money, making it more difficult to carry stocks. On the other hand, too great expansion of loans may seem dangerous, as over-expansion has been the chief cause of most financial crises. Expansion of loans always increases the deposits, and increased deposits call for larger reserves.

It is hard to make the uninitiated understand the significance of the word "deposits." The deposits may amount to $1,000,000,000, and yet the actual money held by the banks may be only a quarter of that sum. Deposits, therefore, do not necessarily mean actual money, but money and credit combined. For instance, $10,000 in cash may be deposited by A in the bank. The bank loans $5,000 to B, who thereupon holds it there as a deposit to draw from. The total deposits are, therefore, $15,000, although the actual cash is only $10,000. Thus an expansion in loans always swells the item of deposits.

The Old Dead Line.—The Street keeps the reserves steadily in view; in fact, it continues to give an exaggerated importance to it. The line between a surplus and a deficit was once seen as a sort of a "dead line." When the surplus reserve declined too close to the line the Street began to show signs of concern. There was talk of stringent money and bear prices. Under the Federal Reserve system this fear is fading out gradually with experience. Yet too large a surplus may be a bad sign, as it indicates a small demand for money; it may therefore spell stagnation. If the statement as a whole reported a deficit, Wall Street once feared a flurry, even a panic. Yet even a deficit may be no just occasion for alarm. The bank statement has at times reported deficits when the situation was sound and the Street in a calm. For instance, on October 5, 1889, there was a deficit of $1,688,050, which was increased the following week, but there was no special convulsion in the market. Still it is true that in time of financial distress,

as in the fall of 1890 and in 1893, the first clear sign of trouble is a deficit.

Formerly the 25 per cent. reserve was not for sound but for unsound banking. It was a protection not for the strong, but for the weak, but it was necessary of course that the best institutions should observe the rule equally with the weak. It had indeed been suggested that the Clearing-House should require a general reserve amounting to 30 per cent. Probably even greater reserves, under the disjointed system of individual holdings, could not have imparted the desired factor of safety. The Federal Reserve Act, by concentration of actual reserves, materially reduced the proportion required, in keeping with the best British and Scottish banking practice.

Two Lines of Reserve.—The Federal Reserve system thus provides for two lines of reserve:

1. A main first reserve of seven to thirteen per cent. of net demand deposits and three per cent. of net time deposits in custody of the District Federal Reserve Bank, ready to meet an emergency. Cash is less than a fifth of the legal reserves.

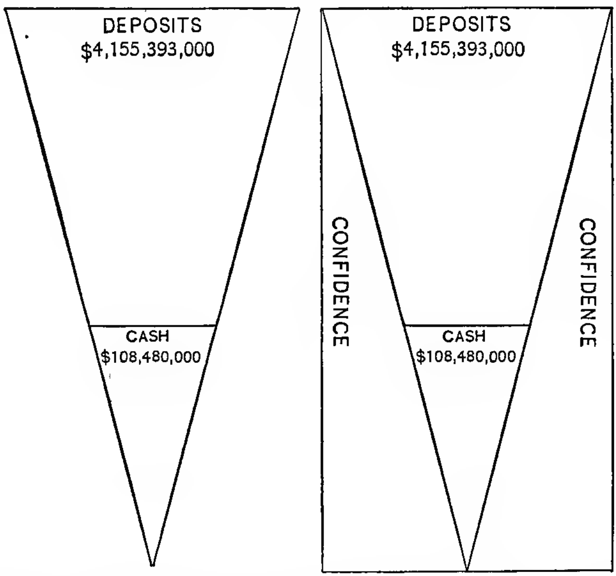
2. The loans on commercial paper in the form of short-term bills of self-liquidating character as prime investments of the bank.

Inverted Pyramid of Credit.—Bank credits may be represented by an inverted pyramid. Now, an inverted pyramid is employed as a common symbol of insecurity, but as Columbus stood an egg on end by flattening it a little on the end, so the inverted pyramid of credit may be made secure, provided the reserves are ample enough to inspire confidence. The inverted pyramid, as it would appear from the bank statement already given, shows something like the illustration on page 311. Now what keeps this pyramid standing? With only $108,480,000 of actual cash on hand in New York, and $4,155,393,000 of demand depos-

its, there would be no security if it were not for one thing: CONFIDENCE. This, then, keeps the pyramid standing.

Let there be, however, a material reduction in the amount of reserves on hand, and confidence would be seriously impaired, and in this fact lies the importance of the bank reserve. But availability is more vital than size in reserves.

Manipulation.—More significant than all the other



items of a bank statement, therefore, are those representing reserve capacity. Credit may be the vital air of the whole financial system, but currency is the oxygen in the air, without which there would be suffocation and death. So, in analyzing a bank statement, the demand and time deposits and the loans, are of first importance. Cash includes notes, gold and silver. Lawful money means any form of money that the Government makes legal tender in payment of debts. An increase in deposits increases the credit-giving

power of the banks. A decrease in them involves a contraction of credit.

Much has been heard in the Street from time to time of manipulation of the bank statement, for the purpose of influencing the stock market. Manipulation of the money market is indeed possible, but it has been made much more difficult by the enlargement of the Clearing-House and the more complete bank statement. A possible way of reducing the cash holdings of the banks is to export gold. Another method is to withdraw legal tenders, and deposit them in a safe-deposit vault. Daniel Drew is said to have carried, in 1866, several millions of dollars in cash, in a carriage, to Jersey City, in order to produce a stringency in the money market. There are various ways of hiding money, and of thus reducing the power of the banks to make loans. It would be difficult, however, to produce proof of manipulation of this character in recent years. Suspicion and rumor are not proof. Moreover, any bank guilty of complicity in any such conspiracy would be disgraced, and any National bank which should continue to receive the deposits of any customer after he has once withdrawn money for the purposes of manipulation, would be regarded as having condoned a dishonorable transaction. But hiding of money to influence the rates of loans and prices of stocks does not involve manipulation of the bank statement itself. That is an honest exhibition of average and actual conditions for the week under review. The Reserve Bank statement is a double safeguard against any effort to mislead the public.

Movement of Money.—As the surplus holdings of the banks are what constitute their power of extending credit, the movement of funds becomes a matter of vital importance. Are the banks gaining or losing funds? That is the question of questions. There are three principal movements of funds:

1. The export or import of specie.

2. The shipment of currency to the interior or receipt of currency from the interior.

3. The payment of money into the United States Treasury and the disbursements of money by the Treasury.

The currency movement from and to the interior is now less affected by the deposits or withdrawals by the country banks. Although as formerly these banks cannot now keep part of their legal reserves in New York, many still keep good balances there. The New York banks now are, however, far less liable to calls from these banks whenever the local demand for money becomes acute. That condition is reflected into the District Reserve Bank. In addition to acting as depositories for the reserves of the member banks, the District Reserve banks act practically as clearing-agents for a large part of the commerce of the Reserve Districts. But interior manufacturers and agriculturists are continually sending their products to New York for sale. The money paid for these products is, of course, paid through the banks. On the other hand, the interior is continually buying articles of merchandise in New York. Annual gross sales in the wholesale commission district, between Cortlandt and Canal streets and west of Broadway, in 1919 were $2,400,000,000.[3] The Wall Street man watches such movements keenly, as on it may depend the course of the stock market. If New York is sending to the interior more than it is receiving, the banks are losing funds, and there will be a contraction of loans, unless the loss to the interior should be counterbalanced by imports of gold or heavy Treasury disbursements. On the other hand, if the balance is in favor of New York the banks should be gaining.

The Street is not content to wait for the bank statement for knowledge of the movement of money. The exports

[3] The New York *Times*, January 26, 1920.

and imports of gold are generally known soon after arrangements are made for the shipments. Daily statements are given of the receipts and disbursements of the Treasury, and fairly complete statistics of the interior movement are obtained during the week by inquiry at the leading banks, which have large dealings with interior institutions.

Reserve Bank and Board Statements.—Business conditions in general and financial conditions in particular are registered in two other official forms bearing on the New York money and credit market, as follows:

Federal Reserve Bank Statement.—The Street is not so fully dependent on the Clearing-House statement, to disclose money movements and credit conditions in New York, since the Federal Reserve statement in large part parallels the former exhibit. It goes somewhat farther, in showing conditions for a week ago and a year ago. In this exhibit the more notable items are: (a) the gold holdings and reserves; (b) the loans, discounts and investments (bills bought); (c) the state of deposits, and (d) the circulation outstanding for the latest week, compared with that of a week and a year ago. From these data are, of course, derived the ratios of reserves, at the bottom of the table, showing how reserves stand (1) with reference to deposits, (2) to federal reserve notes in circulation, and (3) to net deposits, less gold in reserve.

The Reserve Board Statement.—The Reserve Board at Washington issues a statement for the system as a whole, covering the 12 banks, in which the position of the gold reserves is an important feature, along with the returns for bills held, resources, indebtedness to members and the circulation by districts. These facts form the background of the national situation and are thus of significance to the trained readers of the investment, the speculative and the commercial conditions throughout the country. This

is all the more so because the reserve banks are far more intimately coördinated in their coöperative capacities than under the older system. The needs of one reserve bank are met by drawing on the surplus of any of the others which can spare it for the time being.

A brief summary of these several items for the 12 Federal Reserve banks is indicative of the relatively large part which New York plays in this financial "cross section" of the country's banking power:

TOTAL GOLD HOLDINGS AND OTHER ITEMS, 12 FEDERAL RESERVE BANKS, AS OF JUNE 12, 1920

District	Gold Reserve	Bills on Hand	Resources	Due to Members	Notes in Circulation
Boston......	$186,426,000	$202,796,000	$489,749,000	$118,962,000	$277,997,000
New York...	548,406,000	1,006,878,000	1,893,211,000	763,525,000	851,002,000
Philadelphia.	137,023,000	218,264,000	456,001,000	103,044,000	315,201,000
Cleveland...	232,923,000	217,909,000	554,747,000	139,236,000	315,201,000
Richmond...	72,777,000	105,981,000	250,634,000	58.923,000	120,609,000
Atlanta.....	77,401,000	123,167,000	260,830,000	55,270,000	143,070,000
Chicago.....	302,682,000	479,463,000	948,288,000	260,725,000	533,954,000
St. Louis....	72,954,000	108,825,000	257,053,000	64,238,000	127,665,000
Minneapolis.	50,660,000	79,467,000	165,878,000	49,942,000	78,873,000
Kansas City.	71,201,000	109,360,000	269,082,000	81,240,000	97,913,000
Dallas......	50,166,000	74,328,000	187,829,000	55,146,000	82,584,000
San Francisco	162,439,000	200,408,000	416,667,000	119,989,000	232,438,000

In domestic as in foreign exchange there comes a time when balances have to be settled in funds. These settlements may be delayed by various causes. For instance, if rates for loans are higher here than in the interior, the interior institutions, instead of calling for the money due them, may loan it, in the New York market. Western and Southern loans in New York are usually, outside of crop seasons, a feature in the money market in periods of high interest rates.

Crop-Moving Funds.—A less anxious period in the money market is the crop-moving time, under Federal Reserve banking, when the grain crops of the West and the cotton crops of the South are being harvested and forwarded to the markets. When it is recalled that in 1919 there were over $14,000,000,000 worth of crops and

$7,000,000,000 worth of livestock produced, making a total increment of $21,000,000,000 to the national wealth, we realize the service the banks of the country perform in financing the harvesting of these immense crops. Less of this burden now falls on the New York banks, but a share of it still does, and it takes a large use of credit out of Wall Street in the last half of the year. This involves the financing of billions in the export movements mainly through New York banks. The banks send much less, if any, by express or registered mail or by telegraphic transfers through the Subtreasury. Federal Reserve telegraphic transfers are increasingly absorbing this service. By depositing in the Federal Reserve the amounts required to be shipped, that institution will telegraph to another District bank to pay a similar amount to the member bank which is to receive the currency.

The crop-moving period formerly subjected Wall Street to a severe strain. The stock market has more than once suffered from this cause, and the Treasury has been called upon to afford relief by buying bonds, in order to liberate money held in the Treasury and which could then be got into circulation in no other way.

Out-of-Town Expansion.—On the other hand, there are times when the rest of the country outside of New York shows not only a greater volume of, but also a much greater rate of, expansion of loans. In the spring of 1920, when grain and cotton were being withheld at their sources, partly for speculation and partly owing to inadequate transportation, the out-of-town banks showed double the increase in loans, compared with New York during the year preceding. Compare figures in table on page 318.

New York a World's Money Market.—New York, as already noted, possesses many sources of supply of credit. High interest rates open the conduits through which streams flow from one or more reservoirs of credit. From

800 Reporting Banks	April 9, 1920	May 9, 1919	P. c. inc.
New York City.....	$4,781,000,000	$4,146,000,000	15.3
Rest of Country.....	9,445,700,000	7,296,000,000	29.4
Federal Reserve Banks:			
New York City.....	$932,000,000	$806,000,000	15.6
Rest of Country....	1,896,000,000	1,344,000,000	41.1

the Transvaal and the Klondike come new supplies of the yellow metal. Australian gold, imported into San Francisco, is instantly made available in New York by telegraphic transfer through the Treasury. Great banks in Chicago and other Western cities make direct loans in Wall Street on stock collateral or commercial paper. Europe, by a transfer of credit, loans its capital in New York, or, if the interest rates advance high enough, foreign exchange rates may decline to the importing point, and an actual stream of gold flows into the Street. Silver from Mexican and Canadian mines automatically arrives here.

Banks of England and France.—Wall Street not only watches its own bank statement, but so intimately connected have become all the markets of the world that it also studies the statements of the big Government banks of Europe. The Bank of England statement is issued on Thursday, and the trained eye of the financier can read in it the conditions of the English money market, which is the most powerful in the world. The Bank of England discount rate sounds the keynote of the international monetary situation. Likewise the Bank of France is the continental index.

Summary.—It is apparent that the Street, in keeping watch of the money and credit market, has several criteria to go by. First, the Clearing-House statement, giving

the individual banking conditions and the totals for the financial district for its members and others. Secondly, the Federal Reserve Bank statement, especially helpful in disclosing details of gold holdings, volume of discounts and circulation for the district. Thirdly, the Federal Reserve Board statement, issued from Washington, and setting forth the conditions for the country as a whole. Finally, the Bank of England statement, whose discount rate, far more than any other, affords an index to the conditions prevailing throughout the world of trade and finance.

REFERENCES

"The A B C of the Federal Reserve System," by E. W. Kemmerer, Chap. VI.

"Principles of Money and Banking," Harold G. Moulton, Chicago, 1916. Part II: I-V.

"The Operation of the New Bank Act," Conway and Patterson, Chap. XXXI.

"International Commerce," Archibald J. Wolfe, 1919.

"Currency and Credit," R. C. Hawtry.

NOTE.—Special money and banking articles in New York daily and weekly periodicals, along with analytical reviews in the monthly periodicals afford good material for more extended study. The Federal Reserve banks issue weekly circulars in order to present official data and analyses to member banks and others directly interested.

CHAPTER XXI

THE TREASURY AND THE MONEY MARKET

It has become almost an unwritten law of politics that no Secretary of the Treasury can be selected from Wall Street. The reason for this is obvious. Many people fear the power of the Street, and do not want it to have too strenuous an influence in the Treasury Department. Yet every Secretary of the Treasury, from whatever section of the country he comes, is inevitably brought into direct relations with Wall Street. It is not meant by this that the Secretary engages in stock speculation or uses his official power to advance or depress prices. No such scandal as that has developed.[1] But there is the closest possible bond between the Treasury and the money market. When the Government needs money for the purposes of war, it must come to the money market for it. When it desires gold in order to maintain specie payments, it has to come to the Street for it. When it desires to refund its bonds at a lower rate of interest, the operation generally has to go through Wall Street. If, on the other hand, the business interests require relief which the Treasury is able to afford, it has been mainly through Wall Street that the Treasury could let out a part of its surplus by bond redemptions, by enlarged public expenditures, by prepay-

[1] The Secretary of the Treasury, by his control of the public debt, has no doubt means of affecting the markets; but I have never heard of any charge of improper conduct in such matters on the part of any one connected with the Treasury Department.

PROF. JAMES BRYCE in "The American Commonwealth."

ment of bond interest, or by increased deposits of Government funds in banks.

Assistant Treasurer.—The Secretary of the Treasury is the head of three institutions closely related to Wall Street: The Subtreasury, the Assay Office, and the Custom-House. His direct representative in the Street is the Assistant Treasurer, who is a member of the Clearing-House, through which the Subtreasury makes its daily exchanges the same as a bank. In times of financial distress, it was customary for the Secretary to meet the leading bankers at the Subtreasury to consider measures of relief. Now (1920) the Federal Reserve Bank tends to absorb Subtreasury functions, which system, by June 30, 1921, is to cease. But the Subtreasuries are depositories for the gold settlement fund of the Federal Reserve banks.

Government Finances.—Formerly the Subtreasury handled over one-half of the aggregate receipts and expenditures of the United States Government. Into it flowed the receipts of the Custom-House, of the Post-Office, and of other large Government offices. Out of it flowed the payment of interest on bonds, payments for pensions, and the manifold disbursements of the Government for army, navy, and other purposes. The Subtreasury was also the effective agency of the Government in the floating of new loans, in the redemption of bonds, and the larger financial policies of the Treasury Department. The high standing of the office of Assistant Treasurer is indicated by the character of the men who have held it since its establishment in 1846.

The establishment of the Subtreasury followed the fall of the United States Bank, and in the meantime it has been a factor in the Government's financial system. The office was established in the form of nine local branches of the Treasury in as many large cities, pursuant to the Act of Congress of August 6, 1846. The purpose of the act was

to safeguard the funds of the Federal Government, large amounts of which had been lost by the failures of depository banks in which the revenues were kept after the expiration of the charter of the second Bank of the United States in 1836.

Deposits in National Banks.—Until the creation of national banks by the act of June 3, 1864, not a dollar of government revenue ever went into a bank. The national bank act permitted such deposits where protected by adequate security; but the policy of the government varied as to the use of the permission; political prejudices, born in the forties, continued to influence the policy.

Hence, except in recent years, the major part of the Treasury's balance was usually kept in the subtreasuries. Accordingly, when the balance was large, a substantial part of the country's money supply was locked up in the Treasury vaults, to the detriment of business. As far back as 1853, and periodically since that year, this process of keeping money out of circulation created stringency. The anomalous condition arose of having financial trouble when the country was at its most prosperous periods because then the Government's revenues and surplus were largest. The usual recourse to relieve stringencies was the purchase of Government bonds before maturity at heavy premiums, a wasteful policy and unwise when bond retirement contracted the basis of circulation.

Number of Subtreasuries.—There are nine subtreasuries in all, but the one at New York has done fully two-thirds of the business, and carried the largest balance. In 1920 the gross receipts, including currency and coin received for redemption and exchange, amounted to $2,401,521,311; the gross payments were $2,454,366,771; the balance June 30, 1920, was $458,409,408.

The greater part of the balance consisted of trust funds, chiefly coin held for coin certificates outstanding.

Influence on Money Market.—Since the average receipts, or withdrawals of money are thus very large, the transactions had an influence on the money market. Therefore it was determined, back in the nineties, that the public was entitled to know the extent of this influence, and the daily net cash receipts and payments have been published since. Thus bankers were kept advised of the situation created by Treasury operations; and the figures aided those interested in forecasting the weekly bank statement.

The New York Subtreasury is still (1920) the chief office for furnishing gold for export; this is obtained by bankers in exchange for gold certificates or in redemption of United States notes. When exporters prefer gold bars from the Assay Office, the transaction is made through a transfer in the accounts between the two offices.

Transfers of Money.—A very useful function of the subtreasuries was that of making speedy transfers of money between the leading centers. Having usually substantial balances in each of the offices, bankers and merchants deposited cash at New York and had the amount paid out on telegraphic order at, say, New Orleans, Chicago, etc. These transfers were important in facilitating crop movements.

When San Francisco was destroyed by earthquake in 1906, this transfer system was a most beneficent means of providing funds to carry on the current business and for rehabilitation. The catastrophe had locked up the vaults of most of the banks; their credit in New York, however, was unimpaired, and by means of transfers by wire, the Treasury funds in San Francisco which were accessible, were used to the amount of $35,000,000 or more.

The New York Subtreasury has been a member of the Clearing-House for the purpose of exchanging checks, since 1879. The laws, until recently, still required that a large part of the payments to the Government be made in actual

cash, which continued to aggravate the "locking up" process; but an act of 1911, operative June 1, permitted the acceptance of checks for Government dues, which are then "cleared," obviating the use of cash.

Clearings and Receipts.—Owing to the rather unique character of the Subtreasury membership in the New York Clearing-House Association, special regulations affecting the relations of the Assistant Treasurer with the Association and its members have been in force as to endorsements, funds to be used in settlement, return of "not good" checks, etc. The Federal Reserve Bank of New York has shared membership, since November 13, 1914, on much the same basis.

The work of the Subtreasury still includes receipt of money due the Government from any source; the largest single item of this character is the customs revenue collected at the port of New York. Internal revenues were deposited in banks; but since the banks were required to transfer such receipts to a subtreasury when the sum held exceeded the security, and most of them preferred to transfer by drafts on New York, a very large part of the internal revenue from all over the country found its way to the New York Subtreasury. Postmasters also deposited their receipts there; national banks all over the country used New York drafts to make payments due by them on account of their note-redemption funds, taxes, etc.

Although a greater part of the many disbursing officers and paymasters of the Government had accounts at the New York office, drawing checks aggregating many millions annually, the tendency has been more recently to keep such accounts at Washington and make disbursements therefrom; also interest payments on Liberty bond issues.

Much of the work arises from the exchange of money; thus gold and silver are received for certificates and coin is paid out for certificates and notes; small silver, nickel

and bronze coins are taken in and notes given in exchange, and such coins are given out for notes and larger coin.

End of Subtreasury, June 30, 1921.—By act of Congress the operations of the Subtreasury as a fiscal system are required to terminate on June 30, 1921.[2] The Federal Reserve banks in subtreasury cities have already, in certain respects, begun paralleling the special work of the subtreasuries. This is to be noted in the telegraphic transfer of funds from one reserve city to another. Another phase is that of receiving the deposits of government funds. As early as September 4, 1915, the Treasury made its initial deposit of government funds; and even before the United States had entered the war, in 1917, it was arranged that collectors of customs and of internal revenues of the 12 reserve cities should deposit all their funds in the federal reserve banks. In New York this would have meant over a billion dollars yearly. That purpose was modified by the Liberty Loan Act of April 24, 1917, under which, in view of the widespread scope of war contracting and of the desire to have the coöperation of banks in the Liberty Loan drives, public funds were not only not concentrated but deposited in more widely scattered depositories than ever. Conferences are now pending as to the distribution of the subtreasury's functions, after having been performed under its auspices for almost seventy-five years by the date set for its dissolution as the Subtreasury system.

Assay Office.—The Assay Office is a branch of the United States Mint, and, as its name indicates, it receives and assays deposits of gold and silver and returns the same to the depositors in the shape of bars, or the Government will give coin for the value of the gold. An interesting book could be written about the Assay Office, its methods of melting and refining, and its marvelous scales,

[2] Subtreasury operations actually ended December 6, 1920.

which are so delicately adjusted that they can weigh one-half of one hair of a person's head. It is from this office that the exporters of gold obtain most of the yellow metal for shipment; and it is in this connection that the Assay Office becomes an important part of the mechanism of Wall Street. In this office, we are confronted with the evidence of the dual character of gold as money or a medium of exchange, and as merchandise, an article itself bought and sold the same as pig iron. The Assay Office makes two kinds of gold bars for sale: small bars varying in value from $100 to $600, bought through brokers for use in the arts; and large bars varying in value from $5,000 to $8,000; the latter are for the export of the precious metal. These bars are stamped with weight and fineness as ascertained by the assay. Exporters pay 5 cents per $100 for them, but even at this cost the bars are cheaper than coin would be.

The coin can be obtained without premium at the Subtreasury on presentation of legal tenders, but coin is inferior to bars for export, because more easily abrased. The stamp of the United States on a coin is effective only within our own boundaries. As soon as the coin reaches a foreign country, its value is determined not by the stamp upon it but by its weight. So, when we are compelled to pay our debts by a gold shipment, the gold, whether it be bars or coin, is weighed and its value ascertained. Coin loses value by handling. Even new coin carried in bags loses value by abrasion during the trip across the Atlantic. It is stated at the Assay Office that if a bag of gold coin is put on the scales and weighed, then lifted on to the floor, and then immediately put on the scales again, the mere movement which this simple operation has involved will cause an abrasion such as will show a difference in weight. Bars, on the other hand, can

be easily handled without much, if any, friction. When they arrive on the other side there is little loss in weight. In a big gold shipment this means much.[3]

Some objection has been made to the policy of the Government facilitating gold shipments by the sale of these bars. But in answer to this it is argued that when we owe money to Europe and our creditors demand payment, we must pay, whatever the cost of shipment. If our own Government increases the cost of obtaining the gold for payment, that makes no difference to our creditors, but it does to us as the debtors, because it makes our burden and expense greater. In facilitating shipments, therefore, we are not doing a favor to Europe, but to ourselves. The Treasury, indeed, suspended the sale of bars for several years, during that perilous period when the Government was struggling to maintain its gold reserves. But the situation has been changed by the enactment of the Gold Standard Law of 1900, and the breaking of the endless chain of greenback redemptions.

The Assay Office occupies one of the oldest buildings in Wall Street, but it has recently been completely reconstructed and enlarged. Erected in 1823, it was for many years occupied by the New York branch of the United States Bank. After that it was leased to private bankers, but in 1853 was purchased by the Government and was first occupied by the Subtreasury. What is now the Subtreasury building, with its Greek façade and its eight Doric columns, was built by the Government on the site of the old Federal Hall for the Custom-House, which occupied it until 1872, when that branch of the Government was removed to the Merchants' Exchange Building, and the Subtreasury took its place. It is one of the most imposing structures in New York, and no other is so rich in historical associations. On the south steps of the Sub-

[3] See Chapter XXII, under topic "How Gold is Shipped."

treasury, stands J. Q. A. Ward's statue of Washington, commemorative of his first inauguration. The very stone on which the Father of his Country stood on that occasion is preserved inside the building. The statue was unveiled in 1883 by Governor Grover Cleveland, when President Arthur and George William Curtis made addresses. Six years later the Centennial of the Inauguration was celebrated there, with addresses by President Harrison and Chauncey M. Depew, and an ode by Whittier. Many memorable public meetings have been held in front of the Subtreasury, and it was there, in 1865, during the excitement that followed the news of Lincoln's assassination, that James A. Garfield gave utterance to the ringing sentence, "God reigns and the Government at Washington still lives."

Under the Federal Reserve.—The relations of the chief financial and fiscal authority in the Federal Government to the money market under the Federal Reserve banking régime are far more direct and businesslike. The system itself was especially devised to enable the Treasury to be a source of strength rather than of weakness to the financial community. In the same way the Treasury has found itself ever since the Federal Reserve System became effective in the position of the major borrower in the Street. Not only in the sale of the $21,432,000,000 of Liberty Loans but in the temporary issues of certificates of indebtedness by many hundreds of millions has the Treasury figured continuously in the money market. At first its policy of arbitrarily keeping the rate of interest on Liberty loans down to the sub-market rates of 3½ to 4½ per cent. in war time prevailed. When, however, market conditions were allowed to assert themselves, the Treasury was obliged to pay the competitive rate of 6 per cent., as in May, 1920. The Federal Reserve Banks have been of marked advantage to the Treasury especially in the distribution of these

offerings. Of the relations of the system to the business side of the money market, the discussion is continued in Chapter XIX.

REFERENCES

"The Independent Treasury of the United States and Its Relations to the Banks of the Country," David Kinley, 1910, National Monetary Commission S. No. 587.

Federal Reserve Bulletin, Washington, 1919-1920.

CHAPTER XXII

FOREIGN EXCHANGE AND THE BALANCE OF TRADE

The foreign exchange transactions of Wall Street are of enormous extent, but, as already said, there are no statistics by which they can be measured. The volume of the foreign commerce of the United States, which is the main source of foreign exchange, comprised the enormous total of $27,552,918,984 of exports for the four years to June 30, 1920, giving a surplus of $13,613,556,660 over imports, forcing sterling as low as $3.19.

Foreign exchange is not merely a mechanism by which the money of one country is converted into, or exchanged for, the money of another country. It is a system of credits by which one country liquidates its indebtedness to another, and this indebtedness may represent:

a—raw or manufactured products purchased;

b—securities bought;

c—interest upon capital invested abroad;

d—money borrowed;

e—expenses of travelers;

f—freights and insurance.

The mechanism of the exchange market supplies facilities by which payments are made for these several things by means of various forms of paper which, under different names, perform, in foreign transactions, practically the same service which checks, drafts, notes and commercial paper do in domestic transactions.

Among the bills issued in foreign exchange are "commercial bills," which are drawn upon foreign purchasers

of American merchandise, as for instance cotton and grain, or upon banks designated by them, and which are generally accompanied by bills of lading and insurance certificates, but sometimes without this protection:—"security bills," which cover purchases of securities;—"finance bills" which are unsecured and are drawn by bankers who thus use their credit to obtain money, and these bills are employed freely in times of financial strain;—"letters of credit," which are sold to travelers, enabling them to draw money from designated bankers in foreign countries; and "cable transfers," by which transfers of credit are made.

Finance Bills.—On the function of finance bills Franklin Eicher says:

> The issuing of finance bills is without doubt one of the most intricate forms of foreign exchange business, but as it is a practice which is carried on to a perfectly enormous extent and has an important bearing on all money-market questions, at least an idea of what the business is, is essential. The finance bill is simply a 60 or 90 day bill of exchange drawn by an American banker on some banker in London with whom he has an understanding regarding such transactions. If the credit of both houses is good the American banker will have no difficulty in selling the bill in the exchange market and with the proceeds he can do as he likes, knowing, however, that the finance bill he has set afloat will be immediately remitted to London, "accepted" by the bank on which it is drawn, and 90 days later will be presented for payment. The London banker who has "accepted" the finance bill when it was first presented to him knows that before the bill falls due and he has to pay it he will be provided with the necessary funds by the American bank which issued the finance bill on him.
>
> The whole transaction in fact is equivalent to the American houses raising money on an unsecured note which has been made payable in a foreign country. The advantage to a house whose credit is good enough to do this business is evident. In a sudden high money market in New York, for instance, millions upon millions are raised by the sale of finance bills. For "accepting" the bills the foreign banker charges a commission of course and the American drawer

of the 90-day finance bills (from the sale of which he received only the 90-day rate) has to cover their maturity at the end of 90 days with demand exchange, but these charges are trifling in comparison with what he can earn on the money in the meantime if the money market happens to be really high.

American finance bills discount better in the London market than those drawn from any other country, a circumstance which is materially responsible for the extensive way they are issued whenever money rates rise. The London banks like to be drawn on in this way, because there is a good commission in the business, and they are not required to put up a cent of money, knowing perfectly well that at the end of ninety days "cover" to meet the maturity of the bills will be provided by the New York banker who set them afloat.

Bill Brokers.—These brokers are an active factor in exchange:

The greater part of the commerce of the world [says Muhleman in "Monetary and Banking Systems"] is paid for by the drawing of bills of exchange which are classed as commercial bills; a portion, however, is paid for by the remittances of bankers' bills. The commercial bills are usually payable at a future date—say sixty or ninety days with us, much longer periods with other mercantile nations. Bankers discount these, paying the shipper of commodities at once; brokers make it a business to collect them for bankers, and there are regular market prices for them. Thus sterling bills (i.e. payable in £) were quoted on a given date at \$4.83¼ for sixty-day paper which was the price bankers were willing to pay for them. The difference between this price and \$4.86⅔, the parity, represents the discount or interest for sixty days, the cost of collection and a slight margin for profit.

The buying and selling of these various kinds of paper constitutes the main business of the foreign exchange market, and in doing this it practically serves as an international clearing-house, for it offsets one debt by another, and thus by a series of eliminations reduces to a comparatively small sum the amount of actual money which one country is compelled to pay to another country, and even

the liquidation of that amount may be delayed by methods of deferred payments.

Intensive Training Required.—Foreign exchange has become so intricate in all of its ramifications over an area as wide as the world itself, involving transactions as great as the volume of the world's international commerce, that comparatively few have a complete grasp of its details. Many experienced bankers even are unable to calculate the profit of a gold shipment. International banking-houses have difficulty in training their clerks in this branch of their business. The young men can be taught to do one or two routine things, but as far as any large comprehension of the subject, that is difficult to learn. The mastery of the subject requires years of training and experience, so that the better known experts in foreign exchange are men trained in the European institutions and business houses of world-wide connections.

In primitive times all trade was a matter of barter. An ox was exchanged for a horse, a camel for a slave, etc. Then money was invented as a medium of exchange. The bill of exchange was another step in advance. It became burdensome, expensive, and perilous to transfer a sum of money over a considerable distance in settlement of every transaction. It was discovered to be easier and cheaper to make such settlements by transfers of credits. Thus was evolved what is known as the system of domestic and foreign exchange, domestic applying to exchanges within one's own country, and foreign to exchanges with other countries. Foreign exchange is more complicated, because each country has a different coinage, and a transaction in foreign exchange therefore involves both a calculation of the difference between coins and of the relative position of the two countries as regards credit.

Misconceptions.—Many popular misconceptions exist as to foreign exchange. A common misconception is that it

means simply an exchange of the coin of one country for the coin of another. It does mean that, but it means much more. An exchange of coin is what has been called the nominal exchange. Gold is the basis of the monetary systems of both England and the United States, but the dollar is the basis of the latter's coinage, and the pound of England's coinage. If one owed a debt in England he would have to pay in English money, as American coin is not legal tender there. So it would be necessary for him to exchange his American dollars for English pounds. The value of the two coins in an international transaction depends not upon the Government's stamp upon them, but upon the amount of gold in them. This is determined by an assay. The equivalent in American money of £1 sterling is normally $4.8666. To pay a debt in England the money may have to be transported there. This involves cost of freight, insurance against loss, and other items of expense.

State of Credits.—The actual rate of exchange depends not only upon the difference in the value of the coin, but upon the state of international credits. For the real exchange is the payment of a debt by a transfer to one's creditor of a debt due from another person. For instance, if A in New York owes B in London £5,000, and C, also in London, owes A a like amount, A liquidates his indebtedness by transferring to B his credit with C, who pays the money to B, thus avoiding two shipments across the Atlantic, from C to A and from A to B. Imagine, if one can, a state of things in which every international debt had to be paid by an actual transfer of coin. Half the ships would be carrying merchandise and the other half gold in payment therefor. The expense and the loss would be prodigious. Commerce, of course, would be impossible, in the modern sense. But by bills of exchange this is obviated.

Bills of exchange are written orders drawn by one person on another who owes him money, generally for merchandise purchased from him, directing him to pay a specified sum at a specified time to a specified person. The form of a bill of exchange is similar to that of a draft, the difference between the two papers being that the draft is an order generally, not on a debtor, but upon a bank or some other custodian of funds belonging to the person drawing the draft. Bills of exchange are negotiable, being transferable by indorsement the same as drafts and checks, and increasing in strength by every additional indorsement. They become, therefore, articles of merchandise like the products whose sale produced them. Bills of exchange are thus bought and sold like wheat or cotton or stocks.

Europe has always bought American products and American stocks, and as the United States always purchases European cloths, chemicals, and other goods, there is never a time when one country has not debts to be paid in the other. There is therefore constant output of bills of exchange and a steady demand for them. Hence has sprung up a class of bankers who find it profitable to deal in these bills, buying from some and selling to others. The Chicago merchant who sells a cargo of grain in England draws a bill of exchange on the purchaser in London and discounts or sells it to a bank. The merchant in Worth Street having purchased a line of English cloth in London, may buy a bill of exchange to pay the debt. Some bills are drawn to be paid at sight on demand, and others at sixty or ninety days. When made payable at some future date, the bill must be presented at the earliest possible time to the person on whom it is drawn, who writes "Accepted" across its face. Naturally the value of a bill depends upon the strength of the names on it. Bankers also draw their own bills on their foreign credits and sell these in the market.

International Clearing-House.—The foreign exchange market is thus, as has been before said, a vast international clearing-house. The transactions of commerce are cleared by this system of transfers of credit just as the transactions of inland trade are cleared by the bank clearing-houses. If our indebtedness abroad is heavy, there is a big demand for bills and the rate of exchange advances. If the rate advances to a certain point, however, it may be found cheaper to ship gold than to buy the bills. If, on the other hand, the balance of trade is in our favor, and the volume of our European credits is greater than our debts, the supply of bills is larger than the demand. The rate therefore falls, and if it falls far enough gold is imported.

"It might seem," says Jevons, in his work on the "Mechanism of Exchange," "that in the use of checks internally and of bills of exchange externally, we have reached the climax of economy in metallic money, but there is yet one further step to take. Let us imagine that merchants all over the world agree to keep their principal accounts with the bankers of any one great commercial town. All their mutual transactions could then be settled among those bankers. An approximation to such a state of things exists in the tendency to make London the monetary headquarters of the commercial world and the general clearing-house of international transactions."

As London clears primarily for the world, so New York clears primarily for the United States. Exchange bankers of Wall Street provide with the utmost economy of time and expense for the payment of our indebtedness abroad, for the collection of our foreign credits, and for the payment of the expenses of American tourists by means of letters of credit, and all the other functions of international finance.

Balances to Be Paid.—But, as in the exchanges of a clearing-house, there is always a balance to be paid. For, of course, in commercial intercourse of nation with nation, it cannot be supposed that their transactions exactly clear each other. Foreign exchange provides a convenient method by which we pay for foreign merchandise with cotton and wheat and other American products. But these exchanges are not equal, and there comes a time when balances have to be paid. These balances are settled in gold. If it is a credit balance there is gold to receive. If it is a debit balance there is gold to pay. In clearing-houses the balances are paid at stated times, usually every day. But in foreign exchange the periods of payment are irregular and may be long deferred. Hence the irregularity of gold movements.

When the balance has to be paid there is a gold shipment, for gold, not valued as coin but as bullion, is the only thing that will be accepted in payment of an international balance. But the time of payment is regulated by various influences which often appear very occult. Gold shipments are controlled by the rates of exchange, but these rates are controlled by the supply of and demand for bills. This supply and demand depend on the state of trade between the United States and Europe, and various other factors in international finance, such as foreign investment and foreign travel.

Influence of Money Rates.—But gold shipments are also regulated by another powerful influence, namely, the rates for loans. Money always moves to the point where there is the most profitable use for it, where the rates for loans—the matter of security being equal—are highest. This is true as between different parts of this nation, and it is also true as between different countries. In one sense, there are no boundary lines in finance as there are none in art. London, Paris, Vienna, Berlin, New York—the

movement of money between these great cities is controlled by laws quite distinct from the political and racial barriers that separate them. There is no tariff on credits.

If the rate of discount is higher in London than elsewhere, money is attracted there as iron to a magnet. New York may owe a vast sum of money to London, but an advance in interest rates in Wall Street will postpone the payment, for London may find it more profitable to lend the money here than to call it home where there is less eager demand for it. A few years ago it was said that Berlin was lending money in New York, the difference in the profit of employing the money here over that of use in Berlin being at that time 2 per cent. In 1911-12 the reverse operation occurred; New York loaned vast sums in Germany.[1]

Foreign Loans Relieve the Street.—Therefore foreign exchange includes within it this system of foreign loans. That is, an advance in rates of money generally weakens the rate of exchange, and a decline in money strengthens the exchange market. In May, 1902, to take an illustration, the foreign exchange situation foreshadowed gold shipments as the rates approached closely to the usual export point. But by reason of the interior demand for cur-

[1] "Because of the much more attractive rates offered for money abroad, the total outstanding advance made to foreign markets by American lending institutions probably exceeds to-day $150,000,000. In other words, the volume of these credits created in favor of our banks on the other side is already at the high level of last year, and if the movement continues, it is fair to assume that the figures in the near future will break all records. Such a situation seems to be inevitable, unless the expulsion of capital should be immediately checked. In this way, the American money-market has become much the cheapest in the world, and the situation here is protected by the fact that we will be in a position to draw gold against this huge foreign credit fund, should unexpected need develop on this side. This is a really extraordinary situation and shows that for at least a considerable portion of the present year the foreign money-market will be virtually in the hands of American bankers. This is only another instance of the fact that money invariably seeks the dearest market, or that which bids the highest rate."—"Fourth National Bank Circular," February, 1912.

rency, and an expansion of loans through speculation and syndicate operations, money became scarce, and the rates advanced to 10 and 20 per cent. Immediately there was an avalanche of sterling loans. Europe found it more profitable to loan out her credits in Wall Street than to call for payment. Immediately rates of exchange fell and the stringency in money was reduced. These foreign loans postpone the day of settlement of balances, but as borrowed money must be paid back some time, there comes a day when the debit balances must be settled. The creditor finally demands his money.

In the present unbalanced state of the world's trade (1920) there is a great deal heard about the "balance of trade" as being in favor of one country or another, and as if that controlled the movement of gold. If the United States exports more than she imports, there is a balance in her favor, and when there is a free gold market we might expect an importation of gold. But the exports and imports of merchandise constitute only one item in the international balance sheet unhinged by the bankrupting effects of war.

Balance of Trade.—The balance of trade[2] is a term over which economists and statesmen have been disputing for over two hundred years; for involved in it is the issue of protection and free trade. J. B. Say says that a misconception on this subject was responsible for fifty years of commercial wars, which were carried on because nations thought that the sole object of commerce was to acquire the precious metals. The profits of commerce were valued

[2] The term "trade balance" is generally used for the purpose of indicating the excess value of a country's exports of merchandise over the value of its imports of merchandise, or the excess value of a country's imports of merchandise over the value of its exports of merchandise. In monetary circles the term is employed to denote the ability of a country to import supplies of the precious metals.

GEORGE PAISH.

only as they brought in gold and silver. If one nation bought more than it sold of merchandise, it had to pay specie for the balance, and was therefore said to have lost wealth, just as the other nation which had sold more than it bought, had gained wealth. The idea that neither side lost in an exchange of commerce, but that both sides gained, was overlooked, and everything was sacrificed in an endeavor to check merchandise imports and force exports [3]

While the theory of the balance of trade no longer controls the policies of the nations to the extent it once did, it still has a powerful sway, and to-day an exportation of gold is regarded by multitudes as a national warning, if not a loss of national wealth. If a man pays $20,000 for a house he is no poorer than he was before. He has merely exchanged one article of value for another article of value. And so a shipment of gold is only one of a multitude of exchanges of products that are going on between the people of the different nations. Europe loses no wealth by paying gold for American wheat, for though gold perishes not, and wheat is consumed, the wheat as food is transformed by the alchemy of the stomach into that bodily and mental strength which enables Europe not only to live, but to achieve wealth in other forms.

In Wall Street, however, a gold shipment is unwelcome when it decreases the loaning power of the banks, by reducing their reserves, which regulate the amount of their credit capacity. In this way a gold shipment may cause much injury to the home market. As a matter of fact the great banks of Europe are constantly competing for the new gold which comes from the mines as well as for the old gold which may be drawn from other countries in payment of balances.

Commerce, Credits and Exchange.—But even as to Wall Street, in the light of more recent conditions, this may

[3] See Gustav Schmoller's "The Mercantile System."

be too narrow a view to take. For credits, not gold, govern exchange. For the five years immediately preceding the World War (July 1, 1909, to July 1, 1914) our average yearly excess of exports was $477,000,000. With no mechanism of exchange, this business would have called for the actual transfer between the United States and other countries of that amount of gold, which would, of course, have been a physical impossibility. But by the use of bills of exchange, the great bulk of the transactions were cleared one against the other, so that the net amount of gold actually required to be imported during that period of time was only $86,586,000, in settlement of trade balances. In the calendar year 1919 the excess of commodity and silver exports over imports was $4,165,000,000. If the movement of merchandise were all that controlled the movement of gold, there would have been imported that amount of gold, which then equaled the entire gold reserves of the foreign world's principal central banks.[4] But, as a matter of fact, we exported $291,651,000 more gold than we imported; in other words, instead of Europe's sending gold in payment to the United States, as the trade balance indicated, we were paying debts in the Orient and Latin America by exporting an excess of gold. In the war period (1914-1918), taken as a whole, however, our merchandise (and silver) balance of $11,808,000,000 was largely offset by imports of $10,779,000,000 of gold, and our balance was $1,029,000,000. In 1919 the European countries embargoed their gold and deferred indefinitely payments of interest ($325,000,000 then due) on American loans. That put our trade with most of Europe on an inconvertible paper basis, rather than on a normal gold-balance basis, and resulted in the phenomenal debasement of European exchanges in the New York market.

[4] *Federal Reserve Bulletin*, February, 1920, pp. 144-145: "Gold Reserves in Principal Banks of Issue, 1900-1919." Washington.

Consequently price inflation helped materially to swell the merchandise balance of 1919 to $4,168,000,000; which together with the net gold exports of $292,000,000 gave the United States a so-called "invisible" credit balance of $4,460,000,000, at the beginning of 1920.

Invisible Credits.—Evidently in foreign exchange it is often difficult to ascertain the true position of a nation. Former Secretary Hay has been quoted, in another chapter, as declaring that in the past five years the United States had become a creditor nation; but that was rather a premature forecast,[5] an expression of a belief in the approaching financial supremacy of the United States. It is noteworthy that in 1911, by virtue of its heavy loans abroad, this country was, in a sense, a large creditor of Europe. It may seem strange that there should be obscurity on so vital a question as this, but the fact is that while we have official Government statistics of merchandise, and specie exports and imports, there is no certain way of ascertaining the volume of our "invisible" transactions. Other countries give totals, but they are also approximations. Even the Government statistics of the value of merchandise imports report less than the actual value, because a large though uncertain amount of im-

[5] In an address to the Manufacturers' Association of New York, O. P. Austin, Chief of the United States Treasury Bureau of Statistics, said: "The fear that has been expressed that the maintenance of a large excess of exports over imports would disastrously affect national financial balances throughout the world has not up to the present time been realized, and under present conditions does not seem likely to be realized. The large favorable balance of trade is being redistributed to the world, partly by American tourists, partly in payment of freights on international commerce, partly in payment of the earnings of foreign capital invested in the United States and interest on American securities held abroad, and partly in the liquidation of those securities; but until that foreign indebtedness, which is still estimated at perhaps $2,000,000,000, is cancelled and the United States becomes a creditor instead of a debtor nation, there seems no reason to suppose that a continuation of a large excess of exports over imports will prove a condition to be deprecated."

ported goods is undervalued, in order to escape payment of *ad valorem* duties. On the other hand, as an offset, the element of over-valuation in the demoralized condition of foreign exchange in 1919 was estimated at only 1.4 per cent. of total imports.

International Account Items.—We may, however, outline the problem tentatively. Every year the United States, to mention the leading items, has to pay other countries:

1. For her importations of their products.
2. The freight charges on merchandise carried in foreign vessels for American account.
3. The interest and dividends on American securities owned by foreigners or by Americans making their homes abroad.
4. For securities sold by foreigners in our markets.
5. The traveling expenses of American tourists in foreign countries.
6. The remittances of foreign-born citizens to relatives and friends abroad.
7. For account of claims decided against the United States.

Every year the United States is due to receive from other countries:

1. The sums paid for our agricultural and manufactured products sold abroad.
2. The money brought by immigrants.
3. The outlays of foreign vessels in our ports.
4. The traveling expenses of foreign tourists in our country.
5. The freight paid for merchandise in American vessels in the foreign trade.
6. The sums paid for purchase of American securities and other American investments.
7. By credit for claims settled in our favor.

While Europe is vastly our debtor in the exchange of products, we shall probably remain her debtor on most of the other items of the international balances. For instance, the major part of our commerce is carried by foreign vessels. In 1910 only 8.7 per cent. of all the imports and exports were carried in American vessels; and 21.9 per cent. in 1918. Therefore we still pay other countries for carrying our commerce. Then, the United States is a nation of tourists. In the fiscal year of 1914, 1,689,667 passengers arrived in the United States from other countries, but 286,586 of these were United States citizens returning from travel abroad; only 184,601 were foreign tourists and business agents intending to travel in the United States; the rest, 1,218,480, were immigrants. In 1914 there were 1,002,602 passengers departing from the United States. The amounts paid by Americans abroad are largely in excess of the sums paid here by foreign tourists and brought here by immigrants.

Earlier Estimates.—William Dodsworth made a painstaking effort to arrive at a just estimate of the various unknown items, about 1893, of the balance of trade. He computed the debtor items as follows: Investment account, $90,000,000; traveling credits, $47,000,000; inward freight charges for American vessels, $24,777,000; outward passenger fares per foreign steamships, $8,698,000; undervaluations of imports, $5,000,000; total, $175,475,000. The creditor items were: Money brought by immigrants, $14,-000,000; outlays of foreign ships in ports, $8,250,000; port outlays of passenger steamships, $6,600,000; outward earnings of American vessels, $1,900,000; total, $29,750,000. The debtor balance was $145,725,000, outside of the movement of merchandise and of securities. During the seven years from 1887 to 1893 the excess of merchandise and specie exports was $524,000,000; and the debtor balance on the other items was $1,015,000,000, leaving a debtor bal-

ance of $491,000,000, which was presumably settled by transmission of securities.

This indicates the method of computing the invisible items in international exchange, but the estimate itself needs of course to be corrected by more recent figures.

George Paish, editor of the London *Statist,* in an article published in 1910, estimated that the United States paid other countries in interest upon foreign capital invested here $250,000,000 net; in expenses of American travelers abroad over expenses of foreign travelers in this country, $170,000,000; in remittances to friends in Europe, $150,000,000; and in ocean freights $25,000,000. Thus, according to this estimate, the United States had a balance of nearly $600,000,000 which had to be paid for either in gold, or in excess merchandise exports. It has been shown that the invisible items of foreign exchange in five years (1906-1910) amounted to $2,155,916,922, which is an average of about $431,000,000, so that allowing for deferred payments (through loans) and other occult items, Mr. Paish's estimate was undoubtedly approximately correct. Conditions have changed much since 1910.

How Gold is Shipped.—Enough has been said to indicate the laws that control the movement of gold in settlements of international balances. The gold, however, is not always shipped directly to the country to which we owe it. For instance, we may be indebted to Germany, but ship to France, because Germany owes indemnity to that country, and a shipment to France thus satisfies two debts at once. Or we may owe England, but ship to France, because England is willing to lend the money there. Thus we hear of a "triangular transaction" in exchange, which is a movement involving three countries.

The shipper of gold has a comparatively simple problem to solve. He ascertains its cost in New York; the expense of packing, carting, freight, insuring, interest in

transit, and value in Europe. At the Assay Office he gets a memorandum as to the exact quantity in ounces his proposed shipment (say of $2,000,000 to the Argentine) calls for in the larger $8,000 bars. This he takes to the Subtreasury next door. If the export is approved by the Treasury, he pays an amount in gold notes or certificates equal to the shipment sought. Thence he arranges with the Customs authorities for clearance and finally engages space on the outgoing vessel. Upon presentation of the Subtreasury authorization, the Assay Office delivers the gold in the form of the larger bars.

It is stated that at times a profit of only $200 on $1,000,000 causes a shipment; or some special inducement when no profit arises. A prominent shipper says that if foreign exchange rises to a certain point, it becomes more profitable to remit gold (which has a fixed price in most of the principal countries) to meet obligations than to remit exchange. On the other hand, if exchange declines to a certain point, it may become preferable to import gold than to draw exchange against credit balances abroad. Taking for example a gold shipment to Paris, it has, in normal times, to be recalled that the Bank of France pays 3,437 francs for 1 kilo fine gold, and that the United States Assay Office sells bar gold at the price of $20.67183 per ounce fine plus 40 cents per $1,000 premium. As 1 ounce is equal to 31.1035 grammes, $1 bar gold would bring in Paris 5.16936 francs. Deducting about $2 per $1,000 expenses, the net receipt in Paris for $1 bar gold would be about 5.1590 francs. It therefore results that if exchange in New York is such that less than 5.1590 francs can be obtained for $1, it is cheaper to ship gold than to remit exchange.

This is of value as being the calculation of a practical man trained in foreign exchange, and not of a mere theorist. Formerly most of the gold exported was in coin,

which was transported in bags.[6] But considerable value was lost by abrasion, and an allowance had to be made for this in all calculations. For a number of years the United States would not sell the gold in bars, but now supplies

[6] The following calculation of a gold shipment to London of American eagles, taken from the *Journal of Commerce* (New York), in 1902, still holds good for ordinary times, allowing for changes in charges:

"An American eagle weighs 258 grains or .5375 oz. troy. In \$1,000,000 worth of eagles, therefore, of exactly full weight, there would be 53,750 ozs. The Bank of England will buy American eagles at a fixed rate of 76s. 4¼d. per oz. (sometimes a little more). At that rate 53,750 ozs. of eagles (allowing nothing for abrasion) would yield £205,201. The charges on a shipment of gold to London vary with each shipper and these are trade secrets which are jealously guarded. In a rough way, however, it costs about \$3,000, or £600, to ship \$1,000,000 gold to London. The following formula shows roughly the result of a shipment of \$1,000,000 of eagles of exactly full weight:

"\$1,000,000—53,750 ozs.—which yield		£205,201
Charges—		
Freight, $^{6}/_{32}$ of 1 per cent.	£317	
Insurance, $^{1}/_{22}$ of 1 per cent.	93	
Interest, 10 days, at say 3 per cent.	171	
Cartage, cooperage, say \$100, or	20	
Total	£601—	601
Net yield of shipment		\$204,600

"A shipment of \$1,000,000 eagles on the above basis, then, will realize £204,600 net. This means that every pound sterling costs (1,000,000 divided by 204,600) \$4.8875. If this were all the story, then, so long as demand sterling could be bought at less than \$4.8875, there would be no inducement to ship gold.

"But owing to the so-called 'triangular' operation, or to special concessions offered by the receiver of the gold, it is often practicable to ship gold to Europe when demand sterling is selling below \$4.8875, or even below \$4.88."

The following is taken from *The Wall Street Journal* of Sept. 13, 1905, and illustrates dealings on the mint-price gold basis:

"The price of bar gold 11-12 fine in the London market at present is 77s. 9¼d. per ounce. The mint price of coined sovereigns is 77s. 10½d. per ounce. There is no coinage charge in the United States so that the difference of 1¼d. between the open market price of British standard gold bars amounts to about 2.72 cents profit on

bars at the Assay Office at a slight premium. The shipper packs them in the rear court of the Assay Office in casks, with sawdust to prevent abrasion.

Sterling Loans.—Sterling loans are loans made on bills of exchange, in the ordinary course of foreign trade.

The object of making sterling loans is to obtain money on time at a cheaper rate than the one ruling in the domestic market. The *modus operandi* is as follows:

The banker draws sixty- or ninety-days sight bills on London, which he either hands over to the borrower, indorsed in blank, who then sells them in the market, or he himself sells them in the market on behalf of the borrower, to whom he delivers the proceeds. After the lapse of sixty or ninety days the borrower has to repay to the banker the loan at the current rate of sterling exchange. A sterling loan of £10,000 for ninety days, at $4.84 plus $242 commission, nets $48,158.

Rise of the Dollar Exchange.—What is known as "Dollar Exchange" had its development, though not its origin, in the money market as a result of the superior credit and commercial position of the United States during the War. In that period of five years sterling ranged from $7.00 in 1914 to $3.19 in 1919. With the advent of that struggle the entire international exchange situation collapsed. As the war progressed the issues of paper currency by the warring countries for internal account made the continuance of the gold basis of credit impossible, and

the ounce of fine gold purchased in London and sold at the New York assay office. In a million dollars there are 48,377 ounces fine gold and at 2.72 cents per ounce the profit would be $1,315. The difference between 4.85, the price at which demand sterling sold early on Tuesday, and the par of exchange, 4.8665, is 1.65 cents per pound sterling. Taking for convenience £200,000 as the equivalent of $1,000,000 the difference is $3,300. Add to this the profit on the gold, $1,315, we have $4,615 as the gross profit. From this is to be deducted the expense of importing the gold which varies from 3-16 to ⅜ of 1%, or on a million dollars from $1,875 to $3,780."

put the gold settlement of the adverse international balances out of the question. The United States was the only one of the western nations capable of assuming that rôle among trading powers; our enormous exports drained gold from almost all the commercial world. Thus dollar exchange, or bills drawn on banks and business houses in the United States and payable not in sterling but in dollars, became established here and widely accepted throughout the international world. Not only is this species of commercial bills readily bought by our banks for sale and discount, but the foreign exporter draws bills on the importer's bank in the United States in dollars, and the foreign importer opens accounts in this country on which American exporters may draw. Many of our national banks and trust companies, also newly organized foreign trade banks, have opened branches in foreign lands, thus providing the machinery of a permanent dollar exchange system. The Federal Reserve Board at Washington has created a foreign exchange division which has greatly assisted in promoting this part of our international program.

REFERENCES

"Foreign Exchange," Thomas York, 1920.
"Foreign Exchange," Vincente Gonzales, 1920.
"Money and the Mechanism of Exchange," Jevons, 1876.
"Bullion and Foreign Exchanges," Ernest Seyd, 1868.
"International Exchange," A. W. Margraff.
"Foreign Exchange," Franklin Escher, 1910.
"The Federal Reserve System," Chap. VIII. E. W. Kemmerer, 1920.

CHAPTER XXIII

PRIVATE BANKERS AND UNDERWRITING SYNDICATES

The great bankers are also the great leaders in commerce and industry. They are to-day the world's constructive statesmen. The best brains developed in the last half century have gone not into war, or politics, or law, but into business, and the broadest of all business, because comprehending every other, is that of banking.

In the banking system of the United States, private banks comprise the smallest group, of about one in every thirty, with capital and surplus probably not over $25,000,000. Yet they have as a class shown marvelous prestige and power, and nowhere more so than in Wall Street, whether in peace or war.

When we speak in Wall Street of the "private bankers," we refer to the handful of great banking-houses whose operations are on an international scale, and which in the United States represent the same power that the Rothschilds have so long possessed in Europe. These houses may, like J. P. Morgan & Co., Kuhn, Loeb & Co., J. & W. Seligman & Co., Speyer & Co., and Brown Bros. & Co., be closely allied by partnership ties to other powerful firms in other cities; and represent here the great firms and institutions of Europe, just as August Belmont & Co. have long represented the Rothschilds.

Function.—The private bankers transact a general banking business much the same as the incorporated banks do, but free from many of their limitations. They make call- and time-loans, buy and sell mercantile paper, and

engage extensively in all foreign exchange operations. They act as fiscal agents for corporations and associations. They are dealers in investment securities. They often conduct important operations in the stock market. They underwrite new issues of stocks and bonds for railroad and other corporations. They undertake the reorganization of insolvent or embarrassed railroads. Of recent years they have been especially prominent in the promotion of immense industrial companies. They are at once bankers, brokers, dealers in foreign exchange, promoters, organizers, and underwriters. Their methods of business differ little, if any, from those already described. The main difference lies in the scope and magnitude of their transactions, which are steadily expanding. The deposits and corporate connections of two or three of these private banking houses make them take rank with the most powerful banking institutions in the world.

Field of Operations.—Their field of operations is, indeed, as wide as the world. They do business in London, Paris, Berlin, Rome, Tokio, almost as readily as in New York. This is especially true since the expanding commerce and financial power of the United States have placed the country in the company of the world's "great powers," a competitor of Great Britain and Japan, and a factor in the now pressing problems of the Orient.[1] The private bankers are intimately connected with and influential in the railroad and the big industrial corporations. When it is said that one banking-house in Wall Street is influential in the management of railroads having one-fourth of the entire railroad mileage of the United States; that it is a powerful factor in the boards of directors of the greatest banks and trust and insurance companies; that it is one of the directing forces in the coal and iron trade, and has

[1] See "The Chinese Consortium of 1919-20," N. Y. *Nation*, March 20, 1920.

close alliances with leading corporations in copper, express, and electric light; and that the par value of the securities of the various companies with which it is identified in one way or another is nearly one-third of all the securities dealt in in the New York Stock Exchange, some idea is formed of the magnitude of the operations and the extent of the influence of the private bankers of Wall Street. Whether such power as this is good or bad, depends upon the manner in which it has been acquired and in which it is administered; and while power always arouses violent jealousy and opposition, yet it is the judgment of every one who has made a close study of the Wall Street system, that not only has the growth of the private banking houses been a legitimate evolution in finance and commerce, but that it has as a rule honored its privileges; and that while it has been a power exercised for private profit, it has also been exercised for the public benefit. Even their latest critics admit that "they have exercised the power with exceptional justice and self-restraint." The public fears too great concentration of power.[2]

The late J. Pierpont Morgan was the only man in the world thus far to deal in billions of dollars, as he himself may fairly be said to be the greatest personal product of the Street. His unquestioned leadership in American business was achieved by his wonderful force of character and brilliant judgment. Mr. Morgan's own account of the business of the private banker is therefore of supreme interest, it being the account of an expert. In his testimony of March, 1902, before the special examiner in the suit against the Northern Securities Company, the following dialogue took place between him and the lawyer examining him, as reported in the New York *Tribune:*

[2] Report of Pujo Committee, H. R., 62d Cong., 3d Sess., No. 1593, pp. 132-133.

Q. You are J. P. Morgan, senior member of the firm of J. P. Morgan & Company? *A.* Yes.

Q. Would you mind telling us the nature of the transactions of J. P. Morgan & Company? *A.* We deal in railroad securities and other securities and adjustments—anything in the financial line that is creditable and might suggest itself to the firm as profitable.

Q. Does the firm ever engage in any speculation on its own account? *A.* Not to any extent.

Q. They would not, for instance, purchase $78,000,000 of stock of a railroad for their own account? *A.* Probably not. We might if we thought it desirable.

Q. Their business is to deal in stocks and other securities for the benefit of their customers? *A.* Yes.

Q. And then by financing any good enterprises that might present themselves? *A.* If they wished to do that.

Q. And they would, for instance, loan money for that purpose? *A.* Yes.

Q. For their own account or the account of others? *A.* I don't feel that I ought to be called on to answer that question.

Q. The relations of your firm as bankers to the Northern Pacific have continued since 1896? *A.* Yes, we have been their fiscal agents.

Q. To save time, tell us what that means—what you did for them. *A.* Whatever they required in a financial way.

Q. You mean to say that all their financial business was conducted through your house? *A.* No, we were their New York representatives, and we are to-day.

Q. So that if the Northern Pacific issued any new stock since that time it would be financed through your house? *A.* It would. At least, I should expect it.

Q. And if it was necessary to raise money for the building of extensions and improvements, or for the purchase of large lines, these transactions would probably be financed through your house? *A.* I would expect them to be.

Q. Of course, the detailed financial matters of the road would be handled by others? *A.* Of course.

Q. But all these large matters would be handled by your house? *A.* I should so expect them to be.

Q. And the Northern Pacific has from time to time paid for this service? *A.* I think so.

Q. Every time an underwriter's syndicate is formed there is a

commission paid to the banker and some profit to the underwriter? *A*. Not always. (Laughter.)

Q. That is the usual custom? *A*. We should expect it to be. Otherwise the transaction would not be made.

Q. You would expect to be paid for your services? *A*. Not always.

Q. When you negotiate for a railroad don't you make it pay you? *A*. Not always.

Q. You sometimes do it without any consideration? *A*. We do. It may not be desirable to make a charge. It depends on the nature of the transaction. In a great many cases no charge whatever is made.

Q. You do that work for nothing? *A*. We do it for nothing.

The international banking-houses touch business at every possible point of contact. They may settle rate wars and labor strikes. They shape, subject to the same natural laws which govern all human beings, the destinies of the markets. When two of the great banking-houses clash, the result is like the San Francisco earthquake or a collision between two planets. Such a clash shook Wall Street from top to bottom in the memorable panic of May, 1901. Upon the consummate ability and integrity of these bankers depend in large measure the growth, the stability, the prosperity, and the happiness of the country. Before them we stand in the presence of what is called "high finance." On important occasions, when a public statement is expected from J. P. Morgan & Company, a throng of brokers and reporters gather around the doors of the firm, anxious to get the earliest possible information. A meeting of the Cabinet at Washington does not excite more interest than a "conference at Morgan's."

Underwriting.—There is one special function of the private bankers which needs explanation. They underwrite new issues of securities either by established corporations or by newly organized companies. To underwrite is to insure. A company desires to raise, say, $50,000,000,

and to do this, issues bonds secured by a mortgage on its property. It possesses no facilities for selling these bonds to the public. It must place the bonds, or float the loan, as the phrase is, through a banking-house, which either underwrites the issue itself or, if it is too large for its own resources, forms an underwriting syndicate. A syndicate is a combination of capitalists united for the purpose of prosecuting an enterprise requiring a large amount of money. The underwriters agree to take the entire issue of securities; that is to say, they insure it, being prepared to pay for every bond that is not sold to the public.

It is scarcely necessary to say that this is an operation often involving great risks. The underwriters must be men of large capital, extensive resources, wide and influential connections, and thorough understanding of the markets.

Nothing is more important in issuing new securities than to know when is the best time to issue them. If the market is flooded with new securities, if there has been an overproduction of stocks and bonds, if the demand is sluggish and prices are declining, the time is unpropitious for a new issue. It has been said that only once in a generation would a combination of conditions exist favorable to such a stupendous enterprise as the organization of the United States Steel Corporation.

Numerous underwriting syndicates are formed composed of weak material, and managed by adventurers in finance who have little to lose and much to gain. These are generally unable to carry the enterprises they have undertaken to insure, and the result is a crash in which many innocent victims suffer.

U. S. Steel Syndicate.—For the United States Steel Corporation a syndicate was formed to underwrite it. It was estimated that it might require $200,000,000 to float the

huge company. The syndicate pledged itself to furnish that sum. A first installment of $25,000,000 was called, and paid in to the managers of the syndicate. No official statement is made to the public of such operations. They are considered private business, and even subscribers to a syndicate may know little about its affairs beyond the fact that they put in so much money and draw out so much profit. But it has been announced that in the case of the Steel syndicate it was so successful that not only was $25,000,000 all that was necessary to be paid in of the $200,000,000 pledged, but that this sum was paid back to the subscribers in addition to many millions of dollars in profits.

Great as are the profits, they are generally no greater than the risks involved. The United States Steel Corporation at one time determined to retire $200,000,000 of preferred stock and issue $250,000,000 of bonds in its place. It was announced that the underwriting syndicate would guarantee $100,000,000 for this operation and receive 4 per cent. commission on the amount of the bonds actually placed. The syndicate would thus have a prospective profit of $10,000,000 if the entire issue should be sold, and one-fourth of this, or $2,500,000, would go to the banking-house managing the syndicate.

Underwriting Profits.—The rule in underwriting new securities is that the syndicates shall receive a commission of 5 per cent. on the value of the securities underwritten. Let us return to the illustration of a railroad issuing $50,000,000 of bonds. The railroad, it may be presumed, is of good standing, and the security excellent. The company prefers, instead of securing a high premium on the bond, to save in the annual interest charges. So it issues a 3½ per cent. bond, with the possibility that it will sell at par or perhaps higher. The underwriters agree to take the entire issue, say at 98, but it charges a

commission of 5 per cent., or about $2,500,000, for the labor, expense, and risk attending the operation. The railroad is now secure. It is assured of the money it needs, for which it has, indeed, paid a liberal discount, but no more liberal proportionately than would be required in procuring a modest loan in the ordinary market channels. The syndicate must now sell the bonds. If there is an active investment demand it may be able to accomplish this at once, at a considerable advance over the underwritten price of 98. Suppose it sells at 102, the syndicate would then reap a profit of 4 per cent., or $2,000,000 in addition to the commission of $2,500,000, less, however, the cost of advertising, wages, attorneys' fees, and other expenses. But if the demand was not as great as had been anticipated, the syndicate might find itself with millions of dollars securities on its hands, for which it must pay, but for which there is no adequate market. The big private banker has, however, in his connections with banks and corporations and bond houses such facilities for disposing of securities that the success of a new loan is practically assured as soon as he has taken hold of it.

Risks and Rewards.—The underwriting syndicate often forms a subsyndicate, or practically a blind pool, the members of which take a certain part of the risk involved, with a right to a proportionate share in the profit, less a usual commission of 5 per cent. to the managers. It is through some such arrangements as these that great companies are formed, big loans floated, reorganizations and consolidations effected, and immense enterprises made possible.

There has been much said in criticism of the sums paid to bankers and syndicates as commissions for the marketing of securities for corporations. But the risk is often as great as the possible profit, and in other cases where there is a minimum of risk, coupled with a maximum of profit, the charge made by the banker corresponds in a

measure to the fee of the great specialist in surgery, who may charge $5,000 for an operation taking only five minutes and involving no special labor to himself. But the patient pays not for the time and labor of the surgeon, but for his years of training and superior skill and knowledge. So in finance; if the corporation desires the services of the great specialist, it must be willing to pay the price demanded.

In some cases the underwriting syndicate is paid wholly in stock; for instance, in the underwriting of the securities of a big company organized some years ago it was reported that the syndicate would receive in stock an amount equal to 55 per cent. of $50,000,000 of bonds it would guarantee.

In nearly all syndicate operations, especially when the formation of a new company, or the reorganization of an old one, is involved, the services of a legal adviser are required. The corporation lawyer is thus one of the important adjuncts of a private banking-house, and sometimes he is even made one of the partners.

REFERENCES

On financial concentration and control: "Principles of Money and Banking," Harold G. Moulton, Chicago, 1916, Secs. 231-235, p. 471.

On Syndicate Banking, Syndicate Agreements; *op. cit.*, No. 135, p. 238, and other topics in Index.

"Materials of Corporate Finance," Charles W. Gerstenberg, 1915, pp. 499-519, on underwriting agreements; and pp. 595-609, for Clayton Anti-Trust Act, Sec. 8, relating to Interlocking Directorates.

"Banker-Management. Why It Failed." A Lesson from the New Haven. By Louis D. Bradeis, *Harper's Weekly*, Aug. 16, 1913.

Report of the Pujo Committee, Washington, especially the Letter of J. P. Morgan & Co., in "Defense of Financial Concentration," February 25, 1913.

CHAPTER XXIV

PANICS AND CRISES

Born in a boom and cradled in a panic, the history of the stock market has been that of an alternation of booms and panics. The order of events is this: There is first a period of prosperity in business, based on good crops and a sound condition of the markets. Confidence prevails, credit is excellent, manufactures flourish, new enterprises are encouraged, expansion sets in. This induces an active speculation. The people are prosperous, and they are led to invest a part of their surplus earnings in stocks. The public takes possession of Wall Street. The volume of Stock Exchange transactions increases. Prices advance by leaps and bounds. New issues of securities are absorbed quickly. There seems to be no limit to the upward movement. Then overspeculation and its attendant evils follow. Credit is unduly expanded. Recklessness and dishonesty corrupt the markets. Suddenly some event unforeseen, except, it may be, by the most experienced eyes, takes place. It comes in the form of a calamity. It strikes the stock market when its resources are expanded to the utmost. The inflated values collapse like a punctured balloon. Panic seizes the Street. Credit is withdrawn. Money is hoarded. The banks contract their loans, forced liquidation sets in, weak houses are driven to the wall, failures are announced, general bankruptcy is threatened, the Clearing-House is obliged to issue loan certificates for the protection of solvent firms temporarily embarrassed, mills and factories close their doors, thou-

sands of laborers are thrown out of work, and distress is universal. After this follows a long period of stagnation, from which the country and the Street, slowly and painfully, emerge into a new era of good times. Such has been the sequence.

Definitions.—A boom is a prolonged bull movement. A panic is a convulsion in the markets, causing a contraction of credits, a collapse in prices and failures in business. A distinction, however, needs to be made here. The word panic is overworked like many other words. It is commonly used to describe two very different things. Thus, we speak of the panic of 1893, and of the Venezuelan panic of December 19, 1895. But the former was a prolonged commercial crisis, involving the business of the whole country, the baleful effects of which were felt for years. The latter was a sudden paroxysm of fear, involving a crash in the stock market, but scarcely felt outside of Wall Street, and which lasted only a day or two. Prof. W. G. Sumner speaks of a panic as "a wave of emotion, apprehension, and alarm which is more or less irrational." Such was the Venezuelan panic. It was produced by fear of war with England. The fear was caused by a sentence in President Cleveland's message. The war never broke out and the fear of it passed quickly away.

Ten Crises.—There have been ten commercial crises, involving practically the whole country, since 1812, or an average of one every eleven years,[1] so that in the past hundred years there have been alternating periods of financial distress and financial prosperity, each period averaging about five and a half years. But in addition to these great financial crises there have been many panics and semi-panics, most of them confined to Wall Street, but felt with severity there, if not more widely.

Using the word panic, however, in its common meaning

[1] Which coincides closely to the estimate made long ago by Jevons.

as applying to both kinds of monetary convulsions, the national and the local, the commercial and the speculative, it may be instructive to enumerate briefly these successive shocks to business.

Phenomena of Credit.—There have been periods of business depression such as are produced by crop failures, wars or other disasters from the earliest times, but panics in the modern sense are a product of the system of credits and speculation. They might be said to be the price paid by a world of industry for the two great agencies by which increased power is given to commerce, just as steam and electricity have given increased facilities for international communication. The first panic resulting from the misuse of credits and speculation was what is known as "the Mississippi bubble" in Paris in 1719; and a study of the history of this dramatic incident in French history will well repay the student of financial phenomena. It is much more instructive than the South Sea bubble in London which was almost contemporaneous with it, for the latter was conceived in fraud, while John Law, the promoter of the Mississippi scheme, discovered the secret of the power of banking credit, and hoped by means of this to restore the depleted finances of France, only he was carried off his feet by the very power he had invoked, and he attempted to raise a building of ten stories on a foundation intended only for two. All credit and speculative panics, though differing in details and in effect upon the general welfare of the world, closely follow the outlines of this original great panic.

Commercial crises are, however, much more fundamental to the productive and conservative forces of the nations. The greatest economists have for years been studying the phenomena of these crises and there is now a vast body of literature relating to them. No one in charge of large affairs can afford to be wholly ignorant of their his-

tory; yet as a matter of fact every generation of business men seems to be surprised at the outbreak of each new panic; and it is perhaps due to this fact—that each generation has to learn for itself the business laws which underlie the stability of business enterprise, and to learn these lessons by actual experience rather than by study of the past—that we owe in part the periodicity of panics.

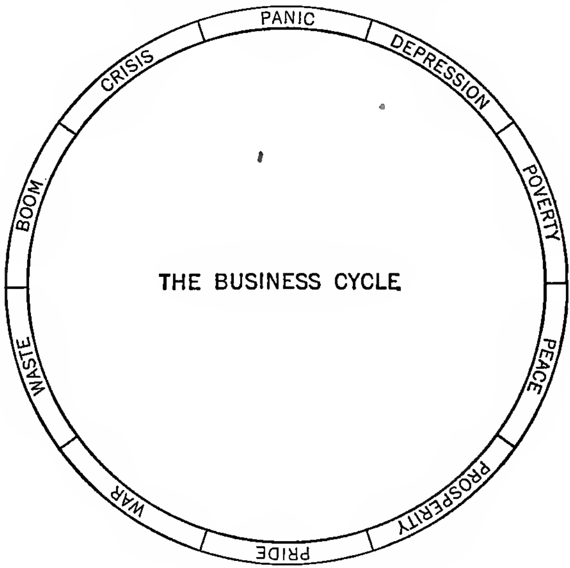
Cycle Theory.—The "cycle theory"[2] of commercial crises is accepted by most students of economic phenomena. This theory is that these convulsions come at fairly regular intervals of about ten years; for instance, great panics about every twenty years and generally a smaller crisis midway between two big collapses of credit. This shorter interval corresponds to the business man's conception of the "nine-year run" between depression and depression. The cycle theory, although one should thus approach the theme with caution and highly useful though it is in a degree, can be easily overloaded until it breaks down.

Of the fact that the history of the world travels in a series of curves and circles there are abundant illustrations, and this is particularly true of economic history. The accompanying diagram reveals this truth.

Starting with business depression, a long period of this leads inevitably to poverty. Capital suffers from diminished profits and labor from reduced wages or lack of employment altogether. When a people are poor they cannot afford to war among themselves or with their neighbors. Peace therefore reigns, and peace gives time and

[2] Mr. John Mills, who has so ably treated of credit cycles, attributes the periodic variations to mental action. A commercial panic, he holds, is the destruction of belief and hope in the minds of merchants and bankers. But though I agree with him so far, I can see no reason why the human mind, in its own spontaneous action, should select a period of just 10.44 years to vary it. Surely we must go beyond the mind in its material environment.—W. STANLEY JEVONS.

opportunity for recuperation and advance. Therefore out of peace springs national prosperity. When this has lasted for some time, it results in individual, corporate and governmental luxury and pride; and pride leads to clashes of ambition and to war. War is waste, though its immediate effect is to promote speculation, inflation and a boom. This appearance of great prosperity is however fictitious.



It is like "the house built upon the sands"; and the inflation of credit and excessive speculation inevitably produce the crisis which surely ends in the panic.

Forecasting a Crisis.—Does this cycle, by aid of analysis of financial and trade statistics, enable us to trace with much accuracy or to forecast the approach of a new crisis? Taking, for instance, the statistics of bank clearings, and business failures, and bringing them together in order to show the extent of business disaster to the volume of busi-

ness transactions, a diagram has been prepared by R. G. Dun & Co. (page 364). It covers thirty years, including three big panics—1893, 1907 and 1914. The line represents one dollar of liabilities of defaulting concerns in the United States to one thousand dollars of bank clearings.[3] The high peaks of this line of disaster represent panic. The line covering the period from 1890 to 1919 shows most vividly the great crisis of 1893, that year of panic; and the less sensational but nevertheless severe crisis of 1896 when the country was going through a campaign in which free silver was the issue. It shows by the rapid downward swing, the quick recovery in 1898 and 1899, after the election of McKinley. The line in the succeeding eleven years, from 1900 to 1911, shows how much more stable and even business conditions were in that decade as compared with the preceding; but in this diagram as

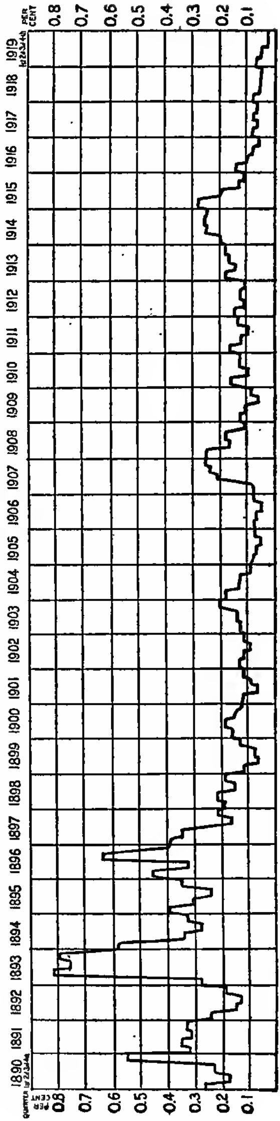
[3] DEFAULTED LIABILITIES PER $1,000 EXCHANGES—BY QUARTERS

	First	Second	Third	Fourth	Year
1919	$0.41	$0.34	$0.19	$0.19	$0.27
1918	0.67	0.48	0.43	0.44	0.50
1917	0.73	0.55	0.64	0.50	0.60
1916	1.22	0.83	0.71	0.52	0.75
1915	2.69	1.98	1.18	1.03	1.62
1914	1.93	2.44	2.54	2.47	2.33
1913	1.76	1.43	1.63	1.74	1.62
1912	1.48	1.04	1.13	1.03	1.03
1911	1.50	1.12	.93	1.26	1.21
1910	1.63	.96	1.17	1.11	1.23
1909	1.18	1.08	.68	.80	.92
1908	2.52	1.60	1.69	1.09	1.68
1907	.77	1.04	1.35	2.48	1.36
1906	.81	.73	.59	.80	.78
1905	.85	.73	.62	.66	.71
1904	1.89	1.25	1.26	.88	1.28
1903	1.14	1.15	1.37	2.02	1.42
1902	1.20	1.11	.86	1.02	.99
1901	1.09	.69	.97	1.11	.95
1900	1.53	1.95	1.54	1.44	1.61
1899	1.12	.62	.83	1.26	.97
1898	1.91	2.21	1.56	1.92	1.89
1897	3.87	3.43	1.68	2.18	2.69
1896	4.47	3.16	6.38	3.95	4.37

in the other we see how the line of disaster rose in 1907-8 during the panic of that period, and again in the war panic of 1914.

It is methods of analysis like this that investigators use in studying the phenomena of panics for the purpose of ascertaining if there are signs of danger ahead.

Brief History of Panics.—Wall Street's first panic, if it may be dignified by that term, was in 1791-92. The close of the Revolutionary War had been followed by a boom in business, both in England and in the new American nation. This boom led to overspeculation, which in this country was in the new securities of the Government and in the stocks of the recently organized banks. "The period immediately succeeding the Revolutionary War," wrote William M. Gouge in 1833, "was in a peculiar sense an age of speculation." Distress and embarrassment followed, and to relieve the stringency in money, Secretary Hamilton bought United States bonds in the open market, thus releasing a stream of Treasury money. But the little panic did not last long, and



for twenty years the United States enjoyed a period of marvelous growth.

The second war with England, in 1812-14, precipitated the first great commercial crisis of the new country. The closing of the ports, the strain and expense of war, and abuses in banking were the causes of this crisis. Peace introduced another time of prosperity, which was interrupted by the short but severe panic of 1818, due largely to overexpansion of credits by the United States Bank and other banking institutions. Much misery ensued, and the debtors' prisons were filled.

It was eight years before there was another panic, and in the meantime the nation, with all the vitality of youth, recovered from its financial illness and enjoyed wonderful growth and strength.

There was a panic in England in 1825, caused by two poor harvests and overspeculation in South American enterprises, and the following year the tide of disaster reached the United States. The Franklin Bank, the Marble Manufacturing Company, and other firms failed, and Jacob Barker suspended. This disturbance over, the country enjoyed many years of prosperity, broken, however, by temporary monetary upheavals in 1829 and 1831.

But in 1837 one of the greatest panics in the history of the country occurred. There had been a partial recovery from this, when another panic broke out in 1839, and there was another upheaval in 1841, due to the final failure of the United States Bank. The next panic was in 1848, but was not so disastrous. It was produced by the more severe crisis in England the preceding year, a crisis in one country nearly always causing a disturbance in another.

Eight years of financial calm and commercial prosperity followed, with immense expansion, due chiefly to the discovery of gold in California, but in 1857 panic, like that

in 1837, burst upon the country almost without warning.

After-War Panics.—The Civil War period had characteristics of both panic and boom. Specie payments were suspended and the banks were obliged to issue loan certificates, but the enormous output of paper money produced all the effects of inflation. There was wild speculation and high prices, but the fearful strain of four years of battles severely taxed the resources of business. Eighteen hundred and sixty-four is called the year of the war panic.

The failure of Overend, Guerney & Company in England in 1866 produced a disturbance in Wall Street, but nothing like that experienced in London. Black Friday in 1869 was a Wall Street panic. The Chicago fire of 1871, involving a loss of $196,000,000, and the Boston fire of 1872, involving a loss of $80,000,000, also caused panics in the Street and much distress in different parts of the country. They were among the many things that brought about the great commercial crisis of 1873, from which both Street and nation suffered immense losses.

The resumption of specie payments in 1879 ushered in a memorable boom, but from the shooting of Garfield, in 1881, there started a gradual downward movement that culminated in the panic of 1884, which, in its worst effects, was confined to Wall Street, but which was felt to some extent all over the country.

The next panic was in 1890, as a result of the suspension of the Barings, of London. This was stopped from becoming a world-wide calamity only by the action of the Bank of England, which used its own resources and those of other institutions uniting with it to save the firm from utter failure. The New York Bank Clearing-House came to the relief of this country by a liberal issue of loan certificates. Wall Street was convulsed by the blow to credit inflicted by this event.

In this same year the Sherman silver-purchase bill was

passed by Congress. While it was still under discussion in the national legislature, A. J. Drexel, the famous Philadelphia banker, said to the writer that it would cause the worst panic from which this country had ever suffered, a prediction fulfilled three years later. The panic of 1893 was caused by the fear that the United States would go on a silver basis, and it did not end until the election of McKinley on a gold-standard platform.

The great convulsions of 1837, 1857, 1873, and 1893 were commercial panics of national scope. As a matter of fact, the effects of such crises are world-wide. All true panics are international. The American panics of 1814, 1818, 1826, 1831, 1837, 1848, 1857, 1866, 1873, 1884, 1890, and 1893 were closely preceded, accompanied, or followed by similar crises in Europe.

Following 1897 came years of plenty, interrupted by a stock flurry caused by the death of former Governor Flower and the early British defeats in the Boer War, the memorable stock panic of 1901 caused by the Northern Securities corner, and the severe liquidation of 1903—called the panic of "the undigested securities."

There was no big commercial depression until the convulsion of 1907, which, although occurring only fourteen years after the 1893 collapse, presented all of the characteristics of a crisis of the first magnitude. It was the splendid and courageous leadership of Mr. Morgan, assisted by another Clearing-House Loan Committee, that prevented the 1907 panic from developing into a complete business collapse; but even though it fell short of being so grave a disaster, yet its effects upon the trade of the country were felt for several years.

Safeguards.—There seems to be no absolute safeguard against the great commercial crises. But there had been evolved a mechanism which checks their progress and minimizes their evil effects. This mechanism is supplied

by the Bank Clearing-House. This is the country's breakwater against the waves of panic. By the issue of Clearing-House loan certificates, the banks have been enabled to extend credit to their solvent customers, and thus thousands of deserving firms are saved from failure. The Aldrich-Vreeland Act saved the day in 1914-'15.

But loan certificates or emergency notes do not prevent panics; they only check them. Their very issue is proof that panic has begun. The very suggestion that certificates should be issued might of itself be sufficient to cause a panic. They are therefore an alleviation, not a preventive. They represent a measure adopted as a last resort. In ten great monetary convulsions emergency issues were of immense service to the country, but something better and more instantaneous was required.

Most Wall Street panics are the result of fear. So, too, of commercial crises. In the panic of 1914 cotton went begging at less than 5 cents a pound. Then a loan fund of $100,000,000 was created, primarily by New York banks, to advance funds on the crop pending recovery of market conditions. But the mere knowledge of such provision so stabilized prices that only about twenty thousand dollars were called for.

Wall Street had a like experience in September, 1901. Nothing could have been more unexpected and terrifying than the shooting of McKinley. This took place, fortunately, after the close of the stock market. One member of the Clearing-House Committee, J. Edward Simmons, was in the city. He took immediate steps to prevent the threatened panic. The next morning, before the stock market opened, a meeting was held in the Clearing-House, attended by the leading bankers, at which a pool of $30,000,000 was formed, and the announcement made that this sum would be loaned in the Exchange at market rates. Not a dollar of the money was used. The $30,000,000

were not needed. The very assurance that the banks were ready and able to protect the market was sufficient to prevent any panic.

Defective Currency System.—There was always another source of relief—the Treasury. Better, however, than any Treasury disbursement by redemptions of bonds was a better banking system providing for a more elastic currency. Need of such a system as would safeguard against the ravages of panic and involved currency reform had long been felt. After 1893 the country seemed to be preparing for it, although it took twenty years of persistent agitation and education to bring it about.

The accepted system of a bank-note circulation based on Government bonds, and of Government deposits in the banks secured by bonds, proved absolutely inadequate for the needs of the country. It was antiquated and inelastic. In times of financial distress it failed to furnish the needed relief.

Speaking of the panic of 1893, former Comptroller of the Currency Hepburn in an address delivered ten years later, said:

> The Government was powerless to afford relief. Our currency was as unresponsive to the wants of trade as the pyramid of Cheops. Some banks borrowed United States bonds from savings banks and other institutions and took out circulation, but no bank could buy bonds and take out circulation without aggravating instead of relieving the money stringency. What we need is legislation (or relief from legislation) that will permit banks to do within the law and under wholesome regulations precisely what the banks under stress of necessity did in 1893 in contravention of law.

Loan Certificates.—Mr. Hepburn argued that the time had gone by when the Clearing-House loan certificates could be safely availed of in the city of New York. They would, he said, materially impair our national prestige as a money power in the world of finance and depreciate

our securities as a nation. They would materially injure the banking and commercial interests of the city.

Nevertheless it was found necessary in 1907 again to resort to Clearing-House loan certificates, although in that year and in 1906 upwards of $200,000,000 of gold was imported. In the three months from October, 1907, to January, 1908, an issue of $101,060,000 Clearing-House certificates was issued in New York, and $147,219,700 in forty-nine other cities, making a total issue in the whole country of $248,279,700. The following is a complete record of loan certificates issued by the New York Clearing-House, including $124,695,000 in the war panic of 1914; making a grand total of $394,529,000:

Historical Record of Loan Certificates Issued by New York Clearing-House Association

First Issue		Maximum Issue	Aggregate Issue	Final Cancellation
1860	Nov. 23	$ 6,860,000	$ 7,375,000	March 9, 1861
1861	Sept. 19	21,960,000	22,585,000	April 28, 1862
1863	Nov. 6	9,608,000	11,471,000	Feb. 1, 1864
1864	March 7	16,418,000	17,728,000	June 13, 1864
1873	Sept. 22	22,410,010	26,565,000	Jan. 14, 1874
1884	May 15	21,881,000	24,915,000	Sept. 23, 1884
1890	Nov. 12	15,205,000	16,645,000	Feb. 7, 1891
1893	June 21	38,280,000	41,490,000	Nov. 1, 1893
1907	Oct. 26	88,420,000	101,060,000	March 28, 1908
1914	Aug. 3	109,185,000	124,695,000	Nov. 28, 1914
Total			$394,529,000	

The words of Mr. Hepburn were true, the experience of 1907 demonstrating their correctness. Something better must be devised than Clearing-House certificates as a panic preventive. One of the results of the 1907 panic was to bring about a substantial unanimity among the bankers

of the country in favor of a central reserve bank. That came to fruition in the Federal Reserve Act of 1913, with central control in the Federal Reserve Board.

To recapitulate:

There are two main classes of panics. 1. The commercial crisis, spreading over the entire country and involving every department of business. For this kind of panic there is now one principal mechanism of relief, namely, the Clearing-House loan certificates, which, as has been seen, are only an inadequate measure of the last resort. 2. The Wall Street panic, confined chiefly to the stock market and playing havoc with prices of securities, but not, at least immediately, harmful to outside business. It is sometimes possible by a prompt application of the power of the money market to check the progress of this kind of convulsion.

But it is urged by the financial experts that a new mechanism is imperatively demanded by the conditions of the country, a mechanism that will supply additional and safe currency when it is most needed, and that will be retired when there is no further use for it. This requires a large reserve held in some adequately protected and controlled institution. Such an institution is that of the Central Reserve Association proposed by the Monetary Commission. The creation of this Association would probably deprive New York of part of its present financial power, but on the other hand, relieve it of much of its present burdensome responsibility in time of stress and panic.

REFERENCES

"A Brief History of Panics," Clement Juglar, 1897.

"Financial Crises and Periods of Industrial and Commercial Depression," Theodore E. Burton, 1907.

"Lessons of the Financial Crisis," Cortelyou, Vanderlip, Treat, Ridgely and Schiff, 1908.

''History of Crises under the National Banking System,'' Dr. O. M. W. Sprague, National Monetary Commission, Senate Document 538.

''New York Stock Exchange in the Crisis of 1914,'' H. G. S. Noble, 1915.

Quarterly Journal of Economics, 1907-8, pp. 501-516; and 1909-10, pp. 232-239.

''A Century of Prices,'' Theo. E. Burton, 1919.

''Business Barometers,'' Roger W. Babson, 1918.

''Statistics in Business,'' Horace Secrist, 1920.

''Business Research and Statistics,'' J. G. Frederick, 1920.

CHAPTER XXV

MANIPULATION AND CORNERS

Manipulation is of two kinds, these being well indicated by the Standard Dictionary definitions of the word: 1, adroit or skillful management; 2, fraudulent or deceptive management.

The latter is dishonest without qualification, and much of the odium which attaches to Wall Street is the result of this kind of stock manipulation, which, it may be said, is on the decline, due to restrictive and publicity methods. It consists mainly in the influencing of the course of prices by false reports. This is the only kind of manipulation that can be played by a small man. Any one can lie, and a lie has a wonderful power of communicating itself through the Street by a sort of wireless telegraphy. It is remarkable how many things one hears in the stock market that "aren't so." These false reports generally have a temporary effect on prices. But a lie persisted in is almost as good as the truth. A false report, therefore, may be so often repeated that in spite of official denials many will continue to believe in it, on the principle that where there is so much smoke there must be some fire. In such a case the effect on prices may be prolonged. The laws of the State make it a penal offense to originate or maliciously repeat falsehoods for the purpose of injuring the value of another's property, but it is difficult to track a lie to its lair.

In a suit brought against members of a syndicate charged

with fraudulent manipulation, the complaint thus described its operations:

Selling stocks to the public by improperly spread "tips" and alleged information.

Procuring loans from banking institutions throughout the country on stocks having fictitious values.

Procuring the purchase of stock by means of alleged customers furnished to various stock-brokerage houses throughout the country. The said customers would deposit on margin with the brokers a small proportion of the purchase price of the stocks, and these brokers would immediately buy for their supposed customers' account the stocks required, paying the syndicate's agents the full price thereof, these brokers advancing the difference from their own funds between such purchase price and the amount of margin deposited with them by their supposed customers.

Tips and Wash Sales.—In other words, by false tips and matched orders or wash sales the manipulators endeavored to establish fictitious quotations for their stocks. If, for instance, the security was actually worth only $50 a share, and by this means its market price was established at $120, the manipulators might be able either to sell to innocent investors at nearly 150 per cent. profit, or to obtain loans from country banks for amounts largely in excess of true value. The late Bishop Potter, in an address at Yale, said truly: "The capitalist whom no honest man can hold converse with is he who artificially depresses values to the injury or loss of his fellow directors, or who withholds information regarding the conditions of his company for his own personal advantage, or who by obscure bookkeeping deceives those whose money he holds in trust." He might also have added, "or who artificially advances prices to the injury," etc.

Manipulation and Diplomacy.—But there is a higher type of manipulation than this. It may be described as the fine art of buying and selling stocks to the best advantage. The high manipulator is the diplomatist of the

Street. The diplomatist never lies, but he sometimes makes the worst appear the better reason. He does not lie, but he conceals his purposes so as not to disclose his operations. This is the modern art of propaganda.

Secrecy.—Secrecy is, in fact, the first object of stock manipulation. It is quite impossible to tell in a few words how this is done. But it may be said briefly that the manipulator operates through several brokers at the same time. He may buy through some, and sell through others, so that no one, not even the brokers themselves, can be certain what his true position in the market is.[1] Let us suppose that the manipulator represents a pool which has a large amount of stock to sell. It would not do to throw it upon the market at once, nor is it advisable that the Street should know that the pool is selling. So it may be buying with one hand and selling with the other, being careful, however, to sell more than it buys, and thus in the course of time the whole amount may be disposed of. There may have been a loss on, say, 100,000 shares bought, but the profit on 150,000 shares sold may be so large as to make the entire operation very satisfactory to the members of the pool. In order to maintain the price of the stock it is trying to sell, the pool may find it necessary to buy other stocks, in order to give the

[1] A story told of the late Charles H. Dow is a good illustration of this. Mr. Dow, who had a remarkable memory, had one afternoon a long interview with Jay Gould. While talking with Dow, Gould continued to give stock-market orders to a succession of brokers. This he did without any attempt to conceal what he was doing from Mr. Dow. He told one broker to sell this stock and another to buy that stock, and every few minutes he gave a new order as he stood calmly fingering the stock tape and gravely discussing public questions with his caller. Mr. Dow made a mental note of every order Gould made, and after he left he put them down on paper in regular order. Then he put his analytical mind to the task of discovering from this data whether Gould was a bull or a bear. But even Mr. Dow had to give the problem up, so skillfully had Gould covered his real purpose in a labyrinth of orders.

general market the appearance of strength. Capitalists controlling a railroad system sometimes consider it essential to "support" the stocks of the system, as the credit of the railroad, its ability to borrow money, and the ability of its individual directors to obtain the means for large operations depend, in no small measure, on the market value of its securities. Likewise an underwriting syndicate which has undertaken to float a large issue of new securities is sometimes compelled to prepare the market to absorb them. This preparation may consist of an elaborate manipulation of both money and stock markets, so as to make rates for loans easy and prices of stocks attractive to investors and speculators. As a preliminary to a bull market it is often necessary first to clean out the weak holders of stocks and depress prices to a point where they look like bargains. The first act of a bull pool, therefore, may actually be to bear prices. If the manipulator seeks to accumulate stocks, he will of course try to break prices by a raid or attack on the market, which is accomplished by furiously selling short. Suppose the manipulator discovers that long stock is held in weak hands, and that there are many stop orders in the market. He may institute a bear attack in order to force liquidation, and uncover the stop orders, which, as has already been explained, are orders to sell when prices reach certain figures, generally marking the limits of the customers' margins. The manipulator may, and often does, strive to influence prices in New York by having orders cabled from London, so as to convey the impression that English investors are in the market. This often has the desired effect on prices.

Manipulation of the highest kind is a millionaire's game. It can not be played by the man of limited means. It requires command of immense resources, such, for instance, as James R. Keene possessed as a man of wealth himself and as the agent of capitalists and syndicates of enormous

power. The manipulator in stocks is like the manipulator in politics, who pulls the wires, which are generally underground, in order to control conventions and make nominations. But the politician, while thus engaged, can not entirely ignore the potency of public policies, and can not defy too long the will of the people, or he may be overwhelmed. So the manipulator in stocks, by pulling concealed wires and by a scientific arrangement of his forces as intricate and fascinating as a game of chess, is able to make prices. But he must nevertheless not go too far from the true basis of value, or even he may be overwhelmed in the market.

Manipulation at times plays an important part in stock speculation. For days and even weeks together the market may be in the hands of the manipulators. Difficult as it is to estimate values, it is still more difficult to fathom the intrigues of the manipulators. It is, however, generally possible to ascertain whether the market as a whole is subject more to professional than public control.[2]

Corners.—A corner is that condition of a stock in which the supply is held by one operator or by a clique of operators, and in which many have contracted to deliver to the operator or clique what they can obtain only from the operator or clique. This is a condition which results from the operation of selling short. For instance, the total issue of a certain stock may be 100,000 shares. A clique of operators have quietly acquired all the available supply, as well as 40,000 shares more, bought from speculators who, believing that the price was too high, have sold the stock short. It is obvious that when these shorts are called upon to deliver the stock they have sold, they find that they can buy only from those to whom they have sold, and are therefore caught in a vise. The only way of escape is by settling at a price fixed by the clique or by a repudia-

[2] See reference to Manipulation in Hughes Commission report.

tion of contracts, which amounts to failure. The victims of a corner are not generally entitled to much sympathy, as they have, with their eyes open to the risks involved, sold something they did not own.

Corners may be divided into two classes, one including those which are deliberately planned, and the other those which create themselves. The corner of 1901 in Northern Pacific, which advanced the price to 1,000, was of the second class. It resulted naturally from a contest for the control of the company between two great syndicates which bought the entire issue of stock. Meanwhile, other individuals had sold short what they did not own, and when called upon to deliver on their contracts, found that the market supply was exhausted, and that the two syndicates, having bought for actual control, wanted the stock and not a settlement of differences. The result was a convulsion in the market.

History of Corners.—Wall Street has had many corners in the past eighty years. The most famous of all was Gould's attempt to corner gold, which ended in Black Friday. Another celebrated corner was that in Hannibal and St. Joseph stock in 1881. This was conducted by John R. Duff, and was not successful, owing to the faithlessness of Duff's broker, who was expelled from the Exchange.

Soon after this deal the State Legislature appointed a committee to investigate corners, and its report covered several hundred pages, but resulted in no important legislation. As long ago as 1836 the Stock Exchange itself appointed a committee to investigate corners. There had been the year before two big corners. A clique bought up the stock of the Morris Canal Company much below par and compelled many shorts to settle at 150. There was a corner in Harlem the same year. There were only 7,000 shares then issued, and yet the pool was able to buy

from shorts over 60,000 shares inside of two months, and compelled them to settle at high figures.

In 1863 and 1864 Commodore Vanderbilt's two celebrated corners in Harlem took place. In one he caught the city aldermen, and in the other the State legislators, short, and compelled them to submit to his terms. The corners grew out of a franchise to lay rails on Broadway, and the politicians thought that they held the key to the speculation, but they were beaten by one of the ablest men in American business. The Prairie du Chien corner in 1865; the corner in Michigan Southern in 1866; the many corners in Erie conducted by Drew and Gould; the corner in Northwest, engineered by Gould in 1872, when the shorts had to settle at 230, and when an attempt was made to deliver preferred stock on common stock contracts; and S. V. White's corner in Lackawanna in March, 1884—these are among the notable events in the history of speculation.

Corners in grain, cotton, and coffee, have generally been failures. Even Keene failed utterly in an effort to corner the corn market. The reason is that the products are too large, and there are too many sources of supply, successfully to establish a monopoly. So, too, of copper and silver.

The Stutz motor stock corner of 1920 was more successful. Of 100,000 shares of capital stock issued, a single brokerage firm owned, and with friends and associates in the deal had contracts for the delivery of 110,000 shares, or 10,000 more than existed. In settlement the "shorts" could not borrow from the "open market," but had to get it from the owner on his own terms. But no stock thus controlled is eligible for listing, because it involved manipulation under unfair conditions.[3] The head of the brokerage firm was expelled.

[3] See *The Review*, New York, May 15, 1920.

CHAPTER XXVI

CRITICISMS OF WALL STREET

Wall Street is called upon at more or less frequent intervals to take account of current criticisms and to meet an occasional official investigation of its methods and policies. Abuses arise, especially in prosperous times when people have plenty of money to risk; then a housecleaning follows and objectionable conditions are corrected, after much waste of funds in purely speculative offerings. At all times there are too many men eager to capture the money of stupid people. Wall Street has its bogus brokers, tipsters, blind-pool sharps and bucket-shops. It was estimated some years ago that there were upwards of eight hundred bucket-shops in the United States. Hundreds of these have been put out of commission by adverse State legislation. But they return after each housecleaning, if not watched, in some other form or place. Some advertise largely as "bankers," and maintain expensively furnished suites of offices. As Mr. Clews says, they are the "degenerates" of the Street. The government, through the Post-Office Department and the organized exchanges, wage continual war upon them.

The Street has suffered severely in money and reputation from these pests of speculation. They certainly have done at times a heavy business, a part of which would otherwise flow through the regular channels of speculation. The outsider naturally identifies them with the legitimate operations of the Street. But they are foul excrescences on the stock market.

The Bucket-Shop.—"Bucketing" flourishes wherever tolerated. In the bucket-shop there is no actual transfer of stock or "intent to deliver." All that takes place practically is the registering of a bet on prices. This affords facilities for cheap speculation, and the bucket-shops are filled with clerks and other persons, women as well as men, of small salaries or incomes, all eager to double their money in the Street, and all inflamed by the stories told of the immense fortunes that have been made there. These are the very people who should keep out of the stock market. They have not the means and the knowledge for successful operations there. Most people who enter Wall Street speculation are bulls, and the customers of the bucket-shops bet that prices will advance, so that the proprietors reap a golden harvest in a bear market. In a continuous bull market the bucket-shops generally shut up. They can make no money when their customers are winning. That is the difference between them and the Stock Exchange broker. The latter is most successful when his customers are making money. Every now and then the papers record the failure of one of these bogus firms. The real proprietors decamp, and all that remain are a few clerks, a set of office furniture, and a crowd of clamorous and angry customers. Most of the concerns have high-sounding names, sometimes imitating as much as possible the names of famous houses. Usually the men actually in control keep in the background. Under a law of New York the keeping of a bucket-shop is a felony.

Bogus Brokers.—Writing of bogus brokers, Francis L. Eames says, in his book on "The Stock-Exchange":

These people establish themselves in the neighborhood of Wall Street, in large, imposing offices, with numerous clerks. By extensive advertising in the newspapers and by sending out vast quantities of circulars through the mails, large sums of money are drawn from the public theoretically for speculation in stocks. The bogus

broker is not connected with the Exchange, and no stocks are really bought or sold, though notices of purchase and sale are given to customers, usually without the names of the parties with whom the contracts are supposed to have been made. A favorite method is to induce people to enter into alleged syndicate operations or pools, and customers are told of the large sums that have been made in previous operations.

Although the Exchange wages war on the bucket-shops and bogus brokers, and has tried in every way to deprive them of its quotations, yet they thrive in spite of all. A new crop of victims is harvested every year. The sublime credulity of some people when it comes to investing their money was signally illustrated in the case of Miller, the 520-per-cent.-Franklin-Syndicate man, who even after he was sent to prison for his swindle continued to receive money from persons in different parts of the country, asking him to invest it for them. This was matched by the more recent Ponzi affair of Boston.

A system of public registration has been proposed with official licensing of brokerage concerns, such licenses to be revocable upon violation of approved regulations.

Abuses of Advertising.—Methods differ as between Stock Exchange and bogus brokers. The former, when they advertise, advertise only their names, their business, and their Exchange connection. In February, 1898, the Governing Committee of the Stock Exchange passed the following resolution:

RESOLVED, That, in future, the publication of an advertisement of other than a strictly legitimate business character by a member of the Exchange shall be deemed an act detrimental to the interest and welfare of the Exchange.

The London Stock Exchange not only prohibits advertising by members, but itself advertises the fact in the newspapers as follows:

THE STOCK EXCHANGE

NOTICE

No Member of the Stock Exchange is allowed to advertise for business purposes, or to issue circulars to persons other than his own principals.

Persons who advertise as Brokers or Share Dealers are not Members of the Stock Exchange, or under the control of the Committee.

A list of Members of the Stock Exchange who are Stock and Share Brokers may be seen at the Bartholomew-lane entrance of the Bank of England, or obtained on application to

EDWARD SATTERTHWAITE,
Secretary to the Committee of the Stock Exchange.

COMMITTEE ROOM, THE STOCK EXCHANGE, LONDON, E. C.

This has the effect of marking a line of separation between legitimate and illegitimate brokers like that existing between reputable doctors, who do not advertise, and "irregulars" who do.

But that is no remedy. Advertising is so useful, and now almost indispensable a vehicle of publicity, that to abandon that field entirely to the dishonest seekers after other people's money is a sacrifice of opportunity. The thing to do is to prevent advertising from becoming a connecting link between a rascal and a fool, and make it a tool of legitimate enterprise.

The Hughes Investigation.—After the election of Charles E. Hughes to the governorship of New York, on the masterly record of his insurance exposures a year before, the Stock Exchange came in for a storm of criticism. The panic of 1907 had furnished much occasion. A special commission of prominent citizens was appointed, with Horace White as Chairman and Maurice L. Muhleman as Secretary. This commission paid attention primarily to the stock market, rather than the money market. Their report, after thorough inquiry into all of the condi-

tions and abuses complained of, made, among others, the following recommendations, dated June 7, 1909:

1. That stock exchange firms do no business for clerks of banks or trust companies.

2. That books of members be periodically examined.

3. That certain and strict regulations of branches be insisted upon.

4. That further steps be taken to prevent bucket-shops from getting quotations.

5. That clearing-house sheets be preserved as records for six years.

6. That the Exchange determine a settlement price in corners.

7. That the Curb market be brought under stricter regulations, since 85 per cent. of its business comes through the offices of the members of the big Exchange.

8. That additional restrictions as to listings be applied, that the trading unit be 100 shares and that the unlisted department be abolished.

The major portion of these recommendations was in due time incorporated into the Stock Exchange regulations. It was not thought wise, however, to assume the Commission's recommendations on the following matters: Corners, control over the Curb, holding companies, receivership abuses, closer examination of brokers' books as to solvency, and incorporation of the Exchange. The Commission advised the strengthening of the criminal code as the remedy for much that was complained of. In this respect it was followed—just ten years later—by the Hepburn Committee of 1919-20, in which a more vigilant exercise of administrative powers was recommended to root out these evils of stock trading.

Advisable as the Hughes Commission's suggestions and recommendations were, they did not really go to the bottom of the matter. They did not, for instance, locate the

responsibility for or prevent such abuses as those surrounding the issue of industrial stocks and bonds during 1914 and 1915 by the big corporations which had received enormous orders for munitions. This riot of speculative debauch is a chapter wholly by itself. As has been said, the least that these conditions called for was "greater care in the listings," so that that act on the part of the Exchange may mean a definite measure of protection to the investing public. Until some means be provided to prevent floating any sort of a bogus security on the Curb until open and avowed fraud has been proved by the postal authorities, the public rights must stand ignored and the public authorities be adjudged derelict.

Listings and the Public.—An institution which passes even casually upon the character of business concerns of so enormous a volume of assets cannot regard lightly its responsibility. Its duties are distinctly fiduciary in acting in the rôle of representative for buyer and seller of securities in the stock trading capacity. The listing requirements themselves imply this. But the measure of sanction to the character of the security listed is prone to be underestimated by the Stock Exchange, while the public is inclined rather to look upon listing as relieving it from the duty of examining for itself. But what opportunity have the 61,806 women stockholders[1] investing in the Pennsylvania Railroad stock to make such an examination? In the long run it is the marketing machinery and those who man it that must act as trustees for the vast investing public, in coöperation with honest management.

The tendency of the List, since the United States became a creditor nation, has been to extend its admissions of foreign securities. This takes the form of temporary certificates sometimes designated as "American shares."

[1] Special figures as of October 1, 1920, out of an aggregate of 129,240 stockholders, or 47.8 per cent.

Among the pioneers of more recent years were the 390,375 shares of the Shell Transport & Trading Company and the Royal Dutch Company in 1919, followed in 1920 by the De Beers Consolidated Mining, Limited, and the Rand Mines, Limited, together representing universally-known properties in the mining and the maritime world. This tendency does not, however, lessen the responsibility of trading authorities in listing, nor their vigilance in keeping track of the listed corporations to insure their continuous compliance with listing conditions.

In the views of the stock-market's more insistent critics, it begs the whole question to plead, as against Stock Exchange responsibility, that "if the public is fool enough to come into the market and deal in any gold bricks that are manufactured for its edification, then the public has only itself to thank for the loss." No association of any character in the trading world can afford to be put in the light of a "fence" for the purveying of "gold bricks." But, apart from that, the attitude of eschewing the duty of reasonable regard for the protection of the investing public, must in the long run tend to defeat the very object for which security exchanges exist—to cultivate dependable investment of savings. The least that the public has a right to expect is that such agencies shall standardize and apply all reasonable precautions against defeating the purpose of honest investment, thereby "giving," as Hartley Withers puts it, "the public a certain amount of protection without too much sacrifice of freedom." That would no doubt conduce vastly to enhancing the public confidence in the Stock Exchange as a national institution worthy of trust for the protection it insures to the country's investing power.

Fraudulent Issue of Securities.—The latest inquiry into stock-market conditions has already been referred to—that of the Hepburn Committee submitted January 2, 1920.

Appointed to consider the problem of preventing the fraudulent issues of securities, it dealt mainly with the legal and financial or economic effects of remedies proposed. Of these there were two. One proposed a system of registering or licensing of all offerings to the public, including specific information, before any dealings are permitted. The other made the conditions as to information more exacting, and sought to prevent fraud by holding criminally as well as civilly liable all persons making statements, and requiring all dealers to be licensed by the State.

This New York State Committee rejected both of these as non-preventive. "This State," declared the report, "being the center of the financial world, cannot afford to adopt experimental legislation of some western State. Common sense must dictate that the State shall not place its dependence on legal traps composed of words which, no matter how well chosen, are notoriously easy of evasion; what is needed is a flexible, virile fraud-hunting machinery, driven, not by statutes, but by human intelligence and human activity."[2]

In other words, there is law enough, and any more would deduct more from legitimate economic and statutory freedom than it added by way of protection of buyers against fraudulent sellers of securities. This report again, therefore, emphasizes afresh what business interests have so often noticed before, namely, that for want of the development of our machinery of preventive justice on the administrative side the community suffers from overproduction of statutes to make up for its weakness in the capacity for "virile fraud-hunting."

Pujo Committee's "Money Trust" Inquiry.—Probably the most ambitious of Wall Street investigations was that of the House Committee of Congress (Representative Pujo, Chairman) into the money market. Its procedure was

[2] *Financial Chronicle*, January 17, 1920, p. 199.

based on the claim that a comparatively small group of men in Wall Street have wielded a power over the business, commerce, credits, and finances of the country that is despotic and perilous and is daily becoming more perilous to the public welfare. This existence of the "money trust" was based, it was alleged, on the union of three great business functions, namely, the railroads, the public service and the industrial companies. First, it was claimed, there was the consolidation of banks and trust companies, then the consolidation of the railroads into huge systems, and then the same was done with the industrial units of "big business"; and, finally, the great investment banking houses, by their dealings in bonds, stocks and notes, extended their control over all of the main forms of business with which they came into contact. This was the Congressional concept of the "money trust of Wall Street" in 1913. Nor was it alone shared by Congress. It was a widely current belief.

To the allegation that interlocking directorates, composed of 180 men located in widely separated parts of the country, had at their disposal corporate resources aggregating $25,000,000,000, it was replied that this was not the fact, but was a wholly impossible and untenable economic theory; that an assumption that this vast sum was in cash or other liquid form, subject to the selfish abuse of a few leading or dominating individuals, was capable of doing no end of mischief in the public mind; and, finally, that in a rightly informed and "strong public opinion, such as exists in this country, lies the greatest safeguard of the community" against the assumed menace of banking power in "evil hands." All power, including Congressional, banking and any other, is dangerous in evil hands.[3]

[3] Letter containing statement of J. P. Morgan & Co. to the Pujo Committee, Feb., 1913. Refer also to H. S. Martin's "The New York Stock Exchange and the Money Trust," New York, 1913.

The results of this "money trust" investigation fell far short of expectations. The Committee's attorney had almost exclusive control over the questioning of witnesses. The majority report was satisfied "that there is an established and well-defined identity and community of interest between a few leaders of finance, created and held together through stock ownership, interlocking directorates," etc., but that it was "unable to say that the existence of the money trust has been established in that broad, bald sense of the term, although the committee regrets to find that, even adopting that extreme definition, surprisingly many of the elements of such a combination exist."[4]

Results.—On the strength of this circumstantial evidence, that large banking aggregations which needed curbing had grown up, though of much smaller size than in England and on the Continent, the remedy proposed was "to restore financial equilibrium" by (1) abolishing "interlocking" directorates and stockholdings among banks; (2) by preventing consolidation among national banks, and (3) by imposing 22 new regulations upon national banks as to directorates participating in underwriting, etc. The first of these became the Clayton Act of October 15, 1914, and the second and third were in large part either incorporated in the regulations of the Comptroller of the Currency or embodied in the Federal Reserve Act, one of whose main purposes was "the transfer of all reserve funds from the institutions which were in danger of using them in investments that might become nonliquid and put them in the hands of institutions which would keep them in a liquid form, using them only for the objects of strictly commercial banking."[5]

[4] Pujo Committee to Investigate Concentration and Control of Money and Credit, H. R., 62d Cong., 2d Sess., 1913.
[5] "The Federal Reserve," H. Parker Willis, 1915, p. 198.

CHAPTER XXVII

EXPANSION TO THE BREAKING POINT
(1905 TO 1910)

It is a peculiarity of Wall Street that criticism when first made appears not to have any definite effect; yet in due time the logic of events forces an adjustment of its standards more in keeping with the reformatory proposals. This is ordinary yielding to the requisites of survival, because society has a way of destroying what is not amenable to its standards of institutional usefulness. After the panic of 1907, for which the country at large very generally blamed the Street whether rightly or wrongly, there was a year of depression in which many reforms were suggested but which did not get into working form until 1913. Then the New York legislature put on the statute books several requirements, embodying in no small part what had come into practice in stock exchange operations.

Panic of 1907 an Incident.—In general, however, that spring of panic, which the San Francisco earthquake really precipitated,[1] was but an incident in an expansive movement among the greatest in our financial history. Beginning in 1905 it ran, with the break of 1907, to the end of 1910, making an era of expansion in which Exchange listings reached new high records not exceeded until 1917; and share-trading attained the swollen volume averaging 231,000,000 shares a year for the five-year period of 1905-

[1] One result of that catastrophe, for example, was the sale of $200,000,000 bonds and other securities within a short period by insurance companies of a single center in the East to meet claims in the earthquake region.

1909 inclusive. It was of the year 1910 that the Interstate Commerce Commission said, in the decision of February 23, 1911, rejecting the application of the roads for an increase in freight rates:

> There is no evidence before us which establishes the necessity for higher rates. From the standpoint of net revenue and of dividends upon stock the railroads of the United States as a whole have never before prospered . . . as they did in 1910.

Alternating Currents of Working Capital.—This era of expansion was remarkable for another feature: it was the last of our financial periods under the old banking system. It was also the era in which for our agriculture, manufacturing and financing we still depended on European investors to supply us with ever-enlarging increments of capital. Wall Street functioned as the mechanism of its procurement through the great international banking connections. Normally, each year the western grain communities, after selling most of their crops and livestock, loaned their surplus funds to eastern commercial and financial centers during several months of the year, until crop-making again required their withdrawal. For the inter-seasonal use of these funds a moderate interest sufficed, and they afforded a low-cost supply of capital available for speculative activities based on the Stock Exchange call money market rates. It was authoritatively stated that in the winter of 1906 the East had as much as $500,000,000 in use during the Stock Exchange speculations of that memorably active year. When the West needed its funds for seasonal purposes, the money market drew on Europe customarily in anticipation of the grain, cotton and provisions to be forwarded during the next approaching three or six months. Thus the circle of perpetual capital supply was kept unbroken. In fair weather times, things went well; but there was no effective means

as yet for meeting an emergency. Suppose Europe, with its own expanding programs at home and in every other part of the wide world, should come to be in a similar position, of carrying out similar capital-consuming projects of trade and industry and finance? Suppose the West should retain its money to lend elsewhere as both Milwaukee and Minneapolis were then actually doing to Germany's capital-seeking cartels? Was there enough capital accruing to go around?

World-Wide Competition for Capital.—Yet that is just what happened. The world-wide expansion in enterprises had reached the point where there must come a slowing-up. Large-scale speculation in commodities and stocks required capital, and throughout the world there was more money to be made by developing natural resources such as mines, manufacturing and maritime enterprise than in speculation. Capital had become too cheap to save; the owners were spending more—investing less. In the struggle of seven in a bed for the blanket, to use Bismarck's phrase, some one must lack cover. As early as the fall of 1907 the eminent French economist, M. Leroy-Beaulieu, estimated that the United States was planning to spend in 1908 in its financial and industrial undertakings the colossal sum of \$2,000,000,000 to \$2,500,000,000, to be raised from the general markets. That meant Europe, because this country had then probably not above 1,500,000 investors. In the *Forum* of December, 1907, Alexander D. Noyes quotes him thus:

> Probably the annual accruing capital of the United States does not reach one-third of this sum. It is therefore necessary to find the remainder—seven or eight thousand million francs—in foreign markets. But the outside world is far from having any such sum of ready capital to dispose of. Not only so, but almost all the nations are finding need at home for the full amount of their annual savings. . . . Only four countries, the older reservoirs of cap-

ital in the modern world, are to-day in a position to export it—England, France, Belgium and Holland. And even of these England's capacity for providing surplus capital has been greatly reduced since the South African war, and what still can be spared goes largely to the British colonies. In short, the growing industrial states, particularly the new countries, are at this moment demanding more capital than the whole world has accumulated recently, or is accumulating to-day. From this fact follow two consequences: first, that the users of this capital have to pay more for it, in the shape of a higher rate of interest; second, that they will be compelled to postpone or extend for several years many enterprises on which they had decided and for which they had already made preparations.

Thus ended the period of expansion, not in lower prices, as Leroy-Beaulieu had predicted as inevitable, but in the most pronounced upward swing in commodity prices since the Civil War; in the cancelling of construction projects and the pigeon-holing of the plans for thousands of pending contracts; and in the shrinkage in the country's railway building from nearly 6,000 miles in 1910 to only 831 miles in 1915, while 60 active railway shares fell from a high-low price of \$115.21-\$93.24 in 1910 to \$86.08-\$75.11 in 1915, on the New York Stock Exchange.

Analysis of Exchange Listings, 1911-1915.—Keen observers of security movements found in the New York Stock Exchange listings some indication of that "indigestion" which was not cured by the reversal of 1907. It took liquidation and the European war to do that. A compilation of these listings for the years 1911 to 1915, inclusive, shows that for every dollar of total listings in that five-year period 54.7 per cent., or more than half, went to replace old issues with new ones in the case of stocks listed; and for every dollar of bonds newly listed 24.1 per cent. was for replacements.

Thus the low-rate interest issues were being called in as they matured, and issues of a higher income rate were

NEW AND REPLACEMENT CAPITAL ISSUES COMPARED IN NEW YORK STOCK EXCHANGE LISTINGS, YEARS OF 1911–1915, INCLUSIVE

(Billions—000,000 omitted)

Listings of	Bonds	Stocks	Both
New capital	$2,104	$1,434	$3,538
Old issues newly listed	97	357	454
Total new	$2,201	$1,791	$3,992
Replacing old	701	2,164	2,865
Grand total, 5 years	$2,902	$3,955	$6,857
Yearly average	580	791	1,371
Percentage replaced	24.1	54.7	41.7

substituted to the extent indicated. The limit of saturation had evidently been reached for flotations on public accounts. It was the era of "convertibles" made to hold the public that was gradually but surely getting out of the market, in the Wall Street sense. For it was during these years that many brokerage houses were not making expenses. The tirades of the muck-raker, in the "frenzied finance" magazines, had helped to send the "public" back home without its money. For the years 1911 to 1914, inclusive, the average yearly trading on the Exchange had fallen to less than 100,000,000 shares. This compared with a rate of 231,000,000 shares during the earlier 5 years of 1905-1909. Of course, the small volume of transactions in the year 1914 of less than 48,000,000 shares of stocks was mainly due to the suspension between July 30 and December 15. Yet, apart from that, these were lean years, indeed. It was the first time of a publicless Wall Street.

REFERENCES

"The Horoscope of Business," James H. Brookmire, 1913.
New York *Evening Post*, Saturday reviews in Financial Section.

CHAPTER XXVIII

LIQUIDATION IN PEACE AND WAR
(1911-1916)

The subject of liquidations has as yet received quite inadequate treatment in the literature of the Street. Even a casual regard suffices to show that they belong to those great downward movements of values in securities which at intervals set in in Wall Street. They comprise two classes—national and international. There are shifts of investment and speculative activity, in the first place, such as cause the selling out of railway and other securities of a corporate character and the purchase of tax-exempt governmentals under the income-tax legislation of 1913, 1916 and later; or such selling as arose from the adverse fortune of railways under hostile legislation, including the legalized looting under the Adamson Act. Such liquidations, as a rule, have one sure result—they change the class of people having the ownership of the securities in question, but remain within the same country.

Liquidating Effects of Rising Price Levels.—Pre-war liquidation in domestic finance among the investing classes began on a large scale long before the period of 1911-1916. Indeed, it began as soon as rising prices commenced to make themselves felt on fixed-rate income securities. Ever since the searching life insurance investigation (1906) in New York, investing confidence was somewhat shaken by the disclosures in the methods of what was loosely called "high finance." But beyond and underneath that there was a still more fundamental force at work—a force that put a check on the issuing of low-rate interest-bearing securities. The insurance inquiry, however, gave original

impulse by the continuous feeding out on to the market such of the insurance companies' holdings as the legislature required them to dispose of within a given period of time. That was an undermining influence which caused some private investors to follow suit. But by far the most potent and universal of causes or conditions making for liquidation of securities, especially those of low interest rates, was that epoch-making rise of price levels and its concomitant rise in the costs and the standards of living of the great mass of people all over the world of modern industry and commerce. If a single word could be made to tell the story it might be—automobiles.

Indeed, from the early nineties down through the entire decade the Street could have traced the notably persistent process of selling these low-rate issues. There had been a low-rate period of interest rates, on the strength of which the then Secretary of the Treasury, Leslie M. Shaw, congratulated the country upon the credit of a nation able to fund its maturing debts into the 2 per cent. Consols of 1930. Even eight years later, the Panama Canal loans were issued at the identically low rate of interest.[1] But government credit and the private costs of living there parted company, and in due time it was not the former but the latter power that came to dominate the trend of investment as well as speculation.

Re-investing for Higher Interest.—How this came about is simple arithmetic. People, as prices began to take higher levels, must have more money, especially people who invested their savings or surplus wealth in fixed incomes. Men who had provided for their families by investing in bonds at 3½ to 4 per cent. railway issues or governments, sold and bought other issues, say, of semi-investment character. It was a good time to sell government bonds,

[1] Panama Canal Loan of 1916-1936. See "Statement of Public Debt."

because the banks were paying premiums for them to base circulation on, and the available supply of government bonds was slowly diminishing with the outstanding public debt. So the public sold what yielded 2½ to 3 per cent. governments and bought, say, urbans and interurbans netting from 5 to 6 per cent., thus doubling the rate of income on the same amount of capital invested. The investing consumers were at the parting of the ways, because with them it was a question of lowering their standard of living or of exchanging the low for the higher interest, even though it sacrificed something of safety of principal. What was true of individuals and families supported by inherited investments, was also true of institutions of a cultural character maintained on endowments. They all saw the necessity of doing something; and after conferring with Wall Street bankers and brokers, that was the course taken in no doubt the majority of cases. Financiers in the fields of industrial expansion bid higher for the world's surplus capital and got it by undermining the less productive types of securities. Although this began well before 1911, the tide rose higher and higher until the industrials assumed leadership over railway issues in the next few years, especially in the years between 1914 and 1916, before the United States entered the European war.

International Liquidations.—The other class of liquidations is international. The first great example readily recalled by the stock market came during the silver agitation of 1890-1896 and later scared the British holders of American bonds into selling, for fear that "Americans" might go on to the silver basis. That liquidation was so complete that the editor of the London *Statist* late in 1898 expressed the opinion that the British investing public had divested itself of practically all of our securities it had ever held. The next great back-flow of stocks and bonds came two or three years before the war in Europe, when it was

known that Germany was cashing in much of her stored-up credits of foreign origin so as to build up her gold holdings in the event of war. As a result of that liquidating movement many old underlying bond issues of our railroads came back through the New York Stock Exchange and were gathered in by the savings banks and the insurance companies. Part of the same movement led the holders of American stocks and bonds in Europe, especially continental Europe, to sell out and hoard gold. The hoarding liquidation has not infrequently broken out at home, at a time when some fear seizes the minds of investors. They have again and again sold their investments and put away in their strong boxes gold or gold notes. As much as $20,000,000 to $40,000,000 within the course of from two to four weeks has thus disappeared in the safety vaults of New York alone.

Wall Street's Work in Liquidation.—When these great movements occur the machinery of the Street is not always ready for them. The Exchange has closed only twice—in 1873 and in 1914.[2] What is usually done is to attract the attention of the broker's clientele to the inviting yields at the lower prices. This brings many into the market. Banks themselves not infrequently find it expedient to invest part of their available funds in the liquidated offerings, to protect the market against going below a level which would upset the whole collateral loan system. Likewise institutions and estates, which usually have available funds, purchase on the downward scale so as to avoid absorbing their resources on the higher levels of a declining market. But of recent years the most potent factor in the market liquidations in Wall Street has been the army of odd-lot investors or speculators.

[2] Also after noon, September 16, 1920, following a terrific explosion in front of the U. S. Assay Office in Wall Street.

Stock Exchange Crisis of 1914.—In those last fateful closing hours of July, 1914, when in the short sweep of three days practically every stock market of the world was forced to close, it required no more than ordinary observation to realize that the whole fabric of international finance and trade had collapsed as if over night. After Montreal, Toronto and Madrid had closed on July 28th, the six great exchanges of Vienna, Budapest, Brussels, Antwerp, Berlin and Rome on the 29th, and St. Petersburg and the South American exchanges on the 30th, it seemed inevitable that the two major markets of London and New York must, for the solvency of the world that remained, not venture to resume business on the following day. Not one of the thousands of actors, in that drama of suspense which stood confronting a situation dynamic with unforeseeable developments on a world-wide scale, approached the last quarter of an hour before the opening time of ten, on July 31, without having lived years through these minutes of intensity. At four minutes of ten the news tickers carried the topic: "Exchange Closed Until Further Notice," and the initial step in the crisis was over. The Governing Committee of the Stock Exchange passed three motions: one, that deliveries of securities be suspended until further notice, another that a special committee of four be appointed to report on all matters related to suspension of deliveries as early as possible, and a third motion adjourning the Governing Committee. For Wall Street in particular, and for the financial world in general, the next four and a half months during which the New York Stock Exchange remained closed were among the most fateful in the world's history. An official chronicler thus justifies the action taken:

The rise in exchange on London to $7—a rate never before witnessed; the marking of the Bank of England's official discount rate to 10 percent, accompanied by a run on that institution which re-

sulted in a loss of gold in one week of $52,500,000; the decline of the bank's rate of reserve from the low figure of 40 percent to the paralyzing figure of 14⅝; together with the fact that the surplus reserves of the New York Clearing-House banks fell $50,000,000 below their legal requirements, were reasons enough in themselves to convince the most sceptical of the necessity of what had been done.

The Wall Street Banker's Viewpoint.—For some months prior to the outbreak of the Great War, August 3, 1914, it was known to be the policy of Germany to liquidate her foreign accounts quite generally, in order to strengthen her central banking powers by a larger command of free gold. The commercial world was rather overextended for safety. But at the first jolt of war all Europe began to sell American securities especially, partly because they were the more readily salable and could be easily bought back if the war scare passed by; and partly because they were less likely to be unusually depressed. The flood of liquidations thus set in became, within a few days, so far beyond the control of any existing liquidating agency as to force the close of every European security exchange, thus throwing the entire burden upon the Stock Exchange at New York. It weathered the storm until the evening of July 30, as already described.

Two considerations made this imperative. With the Stock Exchange open, the prices of securities held by the lending banks as collateral were shrinking in values so rapidly as to make bankruptcy inevitable if any attempt were made to carry out the terms of the loans on call. Closing the Exchange was the only means of checking the collapse of official quotations in such a crisis. The second reason was the necessity of protecting the threatening drain of gold in remittance for the incoming securities. Only a beginning was made in the export of $24,776,000 during the first seven days prior to July 31, when the Exchange

first closed its doors. That compared with $107,516,000 exported during the seven months from January 1 to August 1, 1914. The inner aspects of this event as it affected the banking situation are thus described by A. Barton Hepburn, whose prudent counsel had much to do with the policy followed:

> The closing of the Stock Exchange became absolutely necessary. As long as a customer of a bank deposited drafts which were paid through the clearing-house in gold or its equivalent, the bank could not consistently refuse to pay such customer gold when called for; closing the Stock Exchange prevented further sale of securities and prevented gold-exporting houses from receiving checks upon which they could call for gold. The closing of the Stock Exchange was a most serious matter for the New York banks. Interior banks may rediscount or borrow from New York, but the only resources of the New York banks are gold abroad and call loans upon the Stock Exchange. Gold from abroad was impossible and when the Stock Exchange was closed all their call loans became, *ipso facto,* investments, so far as non-availability was concerned; they were left with no resource but their maturities, and comparatively few were prepared to pay their maturing obligations.[3]

Controlling Considerations.—Even among the leaders in finance this action, however, was not entirely unanimous. Some held that it was our one stupendous opportunity to make New York the financial center of the world, that the banks would have come to the rescue of the Exchange had it remained open, and that the closing of the Exchange had in itself enhanced rather than allayed the feeling of panic lurking in the financial mind. But, all this overlooked the fact that Europe had, for at least a month, if not two months, been selling on an extensive scale, through home exchanges, their American securities, the first waves of which had then yet to reach New York. This incoming tide of foreign liquidation had for the better part of a

[3] "A History of Currency in the United States," by A. Barton Hepburn, Chap. XXV, p. 438. New York, 1915.

month been held back by the abnormal conditions of exchange, by the interruption of steamship sailings as governments requisitioned whole fleets for war purposes, and by the risk of capture at sea. At home, too, there were no encouraging proofs of the absorbing capacity of our small army of investors. As brokers opened their mail and read the morning's telegrams on their desks of July 30 and 31, they realized that a spirit of liquidation in which regard for values had absolutely disappeared had seized the old line of the American speculative and investing public. The process had been allowed to run until the point of impending disaster was reached. Then the impossible was done—the New York Stock Exchange was kept closed continuously for four and a half months.

Prices "Pegged" at July 30 Closing.—During that interval a vast amount of liquidation occurred, in regular and in irregular ways. The Committee of Five followed the plan of holding the market for private transactions at the prices prevailing at the close of July 30, and the 1,100 members of the Exchange as a rule adhered loyally to that stand, as a basis of settlement. For bond liquidations and refundings of maturing issues, the bond dealers were controlled by the report of the Committee of Seven, providing that "the placing of securities owned by dealers with their private customers should be approved where the securities can be sold without disturbing the collateral loan situation."

The "Gutter Market" on New Street.—Such was the regular and disciplined procedure. But the irregular trade, known as "The Gutter Market," on New Street, below Exchange Place, operated as a law unto itself. From a second-story window one might hear during the critical days of August offerings of Steel Common at the price of a day's wages in a shipyard. Some days there were twenty, some days forty, and in the days of the greatest pressure

for an outlet, fully a hundred or more buyers and sellers, trading there as they do on the Curb, only in a more repressed manner, in open bids and offerings at panic prices. In that "outlawed" circle, whose volume of business and price concessions no doubt hastened the date of reopening the Exchange on December 15, there were representatives of the bargain-hunting buyers, to whom the dignified Committee of Seven paid its respects on September 9th, as follows, referring to bond sales:

> Transactions with bargain-hunters should not be countenanced and your Committee will not approve the closing of transactions coming under this head. Prices should conform to the spirit which has prevailed during the past few weeks.

Events now passed more quickly as smoother waters appeared ahead. On November 10th the Unlisted Stocks Committee practically announced its request for discharge, on the ground of its work being done. November 12th the Curb Association announced its intention of resuming business on November 16th, and the Chicago Exchange was purposing to open on the 23rd. The New York Exchange authorized resumption in bonds on the floor beginning with the 28th, at prices not below the minimum authorized by the Committee of Three. This having gone along well, the Special Committee of Five announced the dealing in certain specified stocks to begin December 12th for "cash or regular way only and not below the minimum prices authorized by the Committee from time to time." Thus was the liquidation kept within bounds under long deferred selling pressure.

How Contracts Were Liquidated.—An economist once asked a mill owner why he did not close his cloth factory if it came to producing at a loss. His reply, that a going concern is a banker's proposition while a closed concern is one for the sheriff, is pertinent in this connection. Stock

Exchange house clients had accounts, brokers had obligations to banks and collateral loans were largely in use in mercantile banking relations. It was by the coöperation of the banks that the accounts of thousands of clients were liquidated satisfactorily to both parties during this crisis. Where sales of securities at auctions were made necessary in the due process of law, the auctioneers and others showed the same spirit of coöperation. In fact, the entire conduct of the critical situation was a new proof of the superiority of the law of self-preservation as compared with statute law. There were about $100,000,000 of stock sold on the last day of business, July 30, for whose settlement arrangements had to be made. By September 22 the whole mass of contracts had been cleared with the exception of a few accounts of firms in receivers' hands. This unsettled account, under the European system of semi-monthly settlements, would have left a vastly larger mass of clearings to work off. One more item remained—how many securities were due to arrive from abroad on incoming vessels for which the Exchange had to be prepared? An estimate of $40,000,000 to $50,000,000 turned out on examination to be not over $20,000,000, after the arbitrage houses had agreed to cable their correspondents not to ship securities. Thus the outlying supply was eliminated and the situation cleaned up for both local and international account; so that with December 15, 1914, the orderly procedure of liquidation could again be resumed.

REFERENCES

"Financial Chapters of the War," Alex. D. Noyes, 1916.

Recourse to the files of financial periodicals and reviews should be had for further study of the phenomena of liquidation before, during and after the war. Its causes, consequences and methods of handling are as yet almost unexploited themes.

CHAPTER XXIX

WALL STREET AND THE FEDERAL RESERVE SYSTEM

Between the panic of 1907 and the war of 1914 Wall Street did a great deal of serious thinking. The uppermost topic was how to get rid of a panic-breeding banking and currency system which the country's business had long since outgrown. The panic of 1907 had really been a currency panic, precipitated, as the Street still holds, by the threat from Washington to prosecute right and left the captains of industry and the leaders of finance as "malefactors of great wealth."

A Panic with Money Plentiful.—"Our banks," writes one who served most effectively in that crisis, "were unable to relieve the situation by creating currency; there were in round numbers 25,000 banks in the country, each maintaining a separate reserve. At the first sign of trouble they naturally sought to increase their cash holdings to make themselves strong, and hence they competed with each other for currency and thus aggravated a stringency which the law should have enabled them to relieve. Not being able to create credit instrumentalities under the law, which would perform a money function, they created, through their clearing-houses, instruments which did perform a money function, a new credit instrument giving additional banking power. . . . New York's resource was call money on the Stock Exchange and the importation of gold from abroad. Small wonder is it that our commercial history has been marked by frequent currency stringencies and panics of more or less severity. In the

Fall of 1907, the clearing-house banks of New York held $1,250,000,000 subject to check, the savings banks $1,500,000,000, and trust companies $980,000,000, all deposits subject to draft; the total of these three items ($3,280,000,000) exceeded the total amount of currency in the country, including that in the United States Treasury."[1]

Political Factors in Banking Legislation.—Under these circumstances the new banking order, after which the nation was feeling its way, naturally had more or less direct reference to the "correction" of New York's banking position in the national money market. There was much discussion, both in and out of Congress. The appointment of the National Monetary Commission, of which Senator Nelson W. Aldrich was chairman, brought together a whole library of special research studies, now buried away in their voluminous documents not a few of which have been made entirely obsolete by the late war. Out of an honest effort, however, came a general plan—the Aldrich Plan. Scarcely had this basis of discussion been published, proposing a centralized banking and currency control, when the complexion of things political changed. First the House of Representatives became Democratic, then the Senate was lost to the opposing party, and finally the presidency. Thus the traditional policy of a strong central bank in the pending banking legislation lost the right of way and was sidetracked in favor of one nearer the states' rights conception of things governmental. Wall Street, moreover, must be dismantled. But the older idea of state banking had no chance of returning. The nation had passed beyond that ever since 1860. What actually resulted was a compromise—a decentralized system of sectional or district reserve banking under Federal control.

[1] "A History of Currency of the United States," A. Barton Hepburn, pp. 389-390.

The Federal Reserve Act embodied these characteristic features:

1. The federal control lodged in the Federal Reserve Board located at Washington in close ex officio relation with the Treasury, and exercising supervision of the entire system of 12 reserve or district banks of member banks through the person of their local agent.

2. The twelve district reserve banks, in which all national banks within that region, and such others as met the conditions imposed held direct membership, deposited their reserves and obtained their currency.

Significance for Wall Street.—What significance had this system for the New York money market and Stock Exchange? First, it located the center of national control at the political capital, Washington, and not at the financial metropolis, New York. Secondly, in decentralizing the organization under the district system, it made the reserve banks the centers of local control not only of the reserves but also the sources of credit currency, thus purposing to take from New York something of its traditional position as the foremost of central reserve cities toward which funds automatically gravitated in former times. Thirdly, in the geographical districting of the country the twofold idea prevailed of (a) giving to each district reserve bank an area, membership, capital and banking power enough to enable it to enjoy some degree of self-sufficiency of banking capacity for the business interests of the district, without being beholden to any other, except in more or less urgent times. (b) To give to no one district that preëminence in banking power which might enable it to exercise thereby an overshadowing influence on any or all of the rest of the regional units in the system.

Specific Changes Affecting Money Market.—Summarized somewhat more specifically, the changes which the

Federal Reserve effected in the position of New York as a money center and stock market, both actual and prospective, were as follows:

(1) It shifted the bank reserves, on whose availability the stock market was ordinarily directly dependent, from the control of the individual banks to the District Reserve Bank's custody. This laid the basis for the settlement of clearing debits and credits in the Federal Reserve Bank's bookkeeping with member banks.

(2) It created in the district reserve bank a center into which the out-of-town banks not only deposited their reserves but also could apply for currency and credit as their member needs arose, instead of keeping part at least in the central cities of reserve under the earlier system.

(3) It eliminated the Subtreasury as an agency in the telegraphic transfer of funds, such as had been of vast service in emergency times requiring quick relief for distant points of the country. By June 30, 1921, the Subtreasury system is to cease. This function is now performed to an increasing extent by the district Federal Reserve Bank.

(4) Movements of money by express, which formerly comprised a considerable item of expense, have been gradually reduced or almost if not entirely abolished. Transfers by telegraph have practically taken their place.

(5) The emphasis placed on commercial paper and acceptances in the newer currency system has led to the proposal not only to dispense with collateral loans in stock exchange advances from banks, but also to the substitution of term settlements instead of daily clearings, so as to make less constant demand on the resources of the money market than the system of call loans in daily settlements admits of, and to afford an additional market for commercial bills.

Dependence on New York Market.—To a large extent but by no means entirely, has the practice ceased of out-of-town banks keeping excessive balances in their correspondent accounts of New York banks. Some of the leading banks are still known, however, to carry a large proportion of their deposits in country-bank accounts. For these the Clearing-House rules allow its members to pay not over 2¼ per cent. interest. New York is a vast commercial center, both for domestic commerce and foreign trade. Hundreds of the leading corporations with headquarters there are constantly financing large operations in all parts of the country and the world, and New York is the focus for remittance and receipt. But the dependence of the rest of the country on this center for supply of commercial funds, in the sense that it prevailed before 1914, is a thing of the past. What has served to displace these money movements, possibly more than any other factor is the Gold Settlement Fund of each Federal Reserve Bank and the Federal Reserve Agent's Fund of the Federal Reserve Board in each reserve center. By a system of book entries transfers are effected telegraphically, of millions of credit resources from the service of one district to another.

Acceptances versus Call-Money.—Among the essential aims of the Federal Reserve System of banking, the first is the creation of a general discount market for commercial paper. This is what is generally known as the acceptance investment for banking funds. That short-term paper of the self-liquidating kind is the best kind of a second line of reserve is an accepted principle of commercial banking. As compared with collateral loans, its liquidity is regarded as much superior. The development of this particular feature of acceptances as the form in which banks should hold their investment assets is considered vital for the Reserve System. Its relation to the Stock

Exchange and the call-money market is clearly indicated in a report of the American Acceptance Council in 1920, which says:

> Unless the acceptance secures its place as the most important asset in bank portfolios, functioning as a secondary reserve of all banks, we cannot hope to get away from our old system of basing the liquidity of the banking system of the United States primarily on the call-money market of the New York Stock Exchange. It is a question of life and death for the Federal Reserve system.[2]

REFERENCES

Consult the indexes and tables of contents of New York financial and banking periodicals as well as the *Federal Reserve Bulletin* and banking statements, on the subject of acceptances, etc.

[2] The New York *Times*, June 14, 1920: American Acceptance Council's Answers to Bankers' Questionnaire.

CHAPTER XXX

RECOVERY AND READJUSTMENT
(1916-1920)

The United States, outside of Wall Street, had enjoyed a full year of recovery before this country entered into the war. In that time it had not only gained its economic equilibrium, but was again assuming a pace of expansion on a scale of enterprise far beyond any earlier dreams of development. The Street, on the other hand, as usual wanted more evidence of recovery from the doldrums of a few years back before putting faith in the future. Once, however, convinced of the faith of the public in the turn of the tide, then the Street is quick to take the tide with the business community.

Who Makes Bull Markets?—This relation of the public to the Street is described by a critic, at the beginning of the recovery at the end of 1916, in these words:

> Three years ago gloom pervaded every brokerage office in Wall Street. That the public was out of the market, and that there would never again be a big bull market, were predicted everywhere. Then came the war—and convulsion. When Europe began to throw into the market its hoard of American securities, the New York Exchange closed its doors and averted a panic, the biggest panic, perhaps, that the world has ever seen. Wall Street averred that it was only postponing disaster and ruin; since it could not manipulate the market, the financial destruction of the United States was inevitable.
>
> In the meanwhile the country's industries had awakened. Mills, factories, farms, mines, and railroads reflected prosperity and the markets began to rise steadily, not by manipulation, but from natural causes. Still, Wall Street was cautious, timid even. Its fail-

ure to understand the boom immediately was because "Wall Street" of itself does not make bull markets. In all its history not even the so-called inside interests have made one. Always and inevitably it is the public that does it. . . . The raw public took the initial profits; the alleged inside traders—speculative Wall Street—are now making more money than ever before, but with the regret that they did not guess what was coming. In 1913 there were 83,262,639 shares dealt in; in 1914, 48,031,833; in 1915, 173,654,186; and in 1916, 225,000,000.[1]

The "Piker" Public—A New Purchasing Power.—The war in Europe, even before the United States began to take part, after April 6, 1917, had already contributed one new factor to the financial power of the country. That appeared in the form of a newer, a more numerous and a less timid class of investors. Great financiers had often before hoped to see the day when the need of a ten million loan would not have to send the borrowing corporations to Europe. But the progress in the gigantic task of making this American people a nation of investors had not been at all encouraging. In fact, if one cared to read the stock writers of Wall Street in their well-paid magazine articles, mostly authors that seldom if ever got west of the Hudson, he must have been convinced that the descendants of the people who carved out this nation were the most stupid financially on the face of the earth. But the big years of 1915 and 1916 had put money in amounts never before known into the pockets of millions of people of all kinds of places and pursuits. And they were here in the Street during part of 1915, during all of 1916 and down to the day America plunged into the world-wide struggle for the saving of the civilization of Christendom as America believed in it. This great public was there—there with a sense of conviction that to buy

[1] *Saturday Evening Post,* Philadelphia, January 6, 1917: "The Piker's Market," by Maximilian Foster.

foreign and domestic loans as offered was in some way in line with duty as well as good business. They were picking off the seasoned American securities for income. And so it came to pass that the Street was crowded in these recovering years with tens of thousands of orders which took off the liquidating sales in a manner that the oldest observers had not believed possible. But the purchasing power was there, and it stayed there and knew what it was there for. Before we entered the war an advertising authority estimated the total of share-owners at 1,790,000 in the United States; by the time the third liberty bond sale closed it was certain that we had 20,000,000.

The Investment Awakening.—It may be too much to say that the public made the market in the liquidating years of 1916 and 1917. There were far greater forces by which human institutions were swayed than the actions of any limited class of men. Yet who, other than the American public, absorbed the hundreds of millions of shares sold in 1916? The typical board-room manager was signally wrong in despising the service of the newer investment elements that met the outpouring flood of securities. There was not one crowd—there were two, at least. One of these included the speculative element not always inured to this game, but knowing something of similar games in other lines. Possibly of these the manager of a brokerage house spoke when he said of the 1916 speculative and investment boom: "Every piker in Christendom has broken into Wall Street with his shoe-string. They may trade in hundred-share lots or they may trade in thousands; but the difference between these and the shoe-string odd-lotters is only in the size of their trades. The number of those among them who have any real knowledge of what they are doing is negligible."[2] It was

[2] *The Business Digest,* January-March, 1917, p. 432.

largely the score of millions of "pikers of Christendom" that took the burden of the billions of Liberty bonds, of the war savings stamps, in the next two years of war.

But the real staying power came not so much from such, as from the real investors—from the representatives of the various professions, of the skilled trades, and from the technically equipped mechanic; from the foremen of the shop and the leader of the squad of workmen, from the farm and the factory, the small retail trader and the clerks behind the counter; from the workers in constructing cantonments, the men and women in the munitions works, and the gangs in the shipyards. Such was the awakening to universal opportunity to possess some of the income-yielding resources of the nation at a price which came more fully within the reach of the average American than ever before. They bought for income, and they bought at a time when the inside manipulator—a chip on the tide—had no chance to prevent the market from affording full benefit to the buyer.

Financial Import of Odd-Lot Buying.—Although the sale or purchase of stocks in lots of less than 100 shares has come to figure quite largely in smaller speculative dealings, it is in the investment field that the odd-lot operations are now most agreeably seen. Formerly a few well-known houses had specialized in odd-lot trade, and enjoyed a numerically modest clientele of small investors. Odd-lot absorption has become cumulative in its buying power since then. It has been recently said that "the steady increase in the odd-lot business shows the growth of the investment class in this country and is to be regarded as one of the healthiest of economic indications of our financial endurance and stability."[3] In the dealings of these offices with their customers anything from a sin-

[3] *The Street*, article on "The Odd-Lot Business," by Willard T. Ingalls, Sept. 24, 1919, p. 25.

gle share to five, ten or twenty, receives equal consideration. Thus a vast number of orders, especially when the market declines sharply in standard investment shares, may be seen crowding the market, causing the clerical forces of the odd-lot houses to work long after closing hours to overtake the volume of business suddenly created by the fall in market prices. The public benefit of an intelligent interest in the investment of small sums in seasoned securities is far-reaching in its effect both on the investing individual and on the financing capacity of the stock market. Within recent years the head of an odd-lot house was elected president of the New York Stock Exchange. At least one house organ is devoted exclusively to the odd-lot business of Wall Street. Lately the country's leading telephone corporation announced that it had over 135,000 stockholders whose average holdings were under $3,300.

Increase in Wealth Outweighs Shrinkage in Values.—But for the rise of the popular purchasing power the enormous shrinkage in American securities on account of the war must have been vastly greater than it actually turned out to be. Possibly more than any other power, excepting always the coöperative efforts of the combined banking interests of the nation and the Street, did the newly developed investing class save the day when the crisis came. It was estimated in December, 1917, that of the $15,000,000,000 of stocks listed on the Exchange, there had been a shrinkage of over $3,668,000,000 or 24 per cent. between the end of 1916 and November, 1917; and that the $10,000,000,000 of bonds at par value had lost about $1,435,000,000, or 14 per cent. Bonds and stocks together shrunk $5,101,000,000 in value in New York's market. On the total listings of the London market, of $58,000,000,000, an estimated loss of $10,000,000,000 or 17.2 per cent. was figured. It was feared that the withdrawal of vast sums of money in the public hands for the purchase of war bonds might

endanger the business corporations. Certainly it did bring about such a liquidation in standard corporation securities as was without precedent. The country's wealth taken at $250,000,000,000, and allowing half of it as corporate stocks and bonds, a ten per cent. loss would total $12,500,000,000. But its wealth had increased $63,000,000,000, or 33.6 per cent. since 1912. If the Exchange list losses be taken at half the loss on the entire corporate values of the country, these different estimates of liquidating losses are not over a fifth of the increment in national wealth. Thus a rising purchasing power met a falling market—and corporate sovereignty passed to an unprecedented extent into the hands of the new public.

Wall Street's Wider Horizon.—No doubt many old things of offense in Wall Street have in the course of recent years passed away; and many have become new. Out of the agony of a world's struggle for a safer existence there has, among other things, come a rebirth of men's vision and capacity to achieve financial success on lines that are morally justifiable. In Wall Street as in business generally the rules of the game are at once both freer and stricter, judged by the touchstone of service. The Street in common with all other responsible walks of life has felt that new faith in service standards welling up within it. And thus the outlook of Wall Street has changed by the changes within and without. Within is the newer leadership of clearer, wider vision; without is the public with the mightiest purchasing power the world has ever known. Into what sort of a relationship shall these two forces develop? Shall it be one of trusteeship—a leadership of fiduciary regard for the permanent welfare, or simply the exploitation of a temporary opportunity to utilize and then betray public confidence?

Undoubtedly the work of the larger Wall Street, with its vastly extended scope and responsibilities, will require

the coöperation of trustworthy leadership and of the public purchasing power. The change from a debtor to a creditor nation among commercial powers has brought with it vastly greater obligations and opportunities to both the Street and the public. An indication of the future demands are sketched in the following forecast, the four points of which we quote from a Wall Street review:

New Era of Large-Scale Industries.—In all probability we are merely at the beginning of a new era in stock transactions. Instead of million-share days we are likely to see the volume of trading rise above two millions and even three million shares.

Since war burst upon the world in the summer of 1914, this country has made vast industrial and financial strides. We have outgrown the standards of five years ago in all lines of business.

Production has increased tremendously in all lines. New industries have sprung up and old ones have doubled, trebled and quadrupled. Corporations which were infant companies five or six years ago now have the capitalization and earnings of the stock market favorites of 1912 and 1913.

Six New Basic Leaders.—Look at the list: First come the oils with a new fuel epoch ahead of them and no readjustment to face. Motor and tobacco stocks reflect the tremendous prosperity of the country and the tendency to spend money on luxuries. Food stocks with the group embracing companies in the packing industry, cereals and baking, refining of corn, production of vegetable oils, appeal to the buyer of securities because he has faith in the basic soundness of the enterprises. Leather issues have been featured as never before and no one who realizes the demand for shoes the world over will criticize this selection. Shipping shares have been firm because the average buyer of stocks believes the commerce of the world will have need for the equipment and the organization of our leading mercantile marine companies.

New Wealth Will Drive Wall Street.—Wall Street alone has been slow in reflecting the changed financial position of the country. Stock Exchange transactions until quite recently could have been measured by old standards. Our participation in the war was largely responsible for this. We are now likely to see markets that will more accurately portray the growth made by the country. Each new company whose securites are listed on the Stock Exchange has its

group of followers; thousands of new millionaires will swell the number of wealthy operators in the market.

On active days during the present market there are dozens of stocks with transactions running well into the thousands for each one whose names were unknown on the "Street" five or six years ago. In the reconstruction period ahead of us we will see the list greatly expanded, while the widening interest on the part of the public will swell the volume of trading to proportions far outstripping former standards.

A World-Wide Clientele.—Millions of persons who have bought Liberty Bonds have received their primary lesson in the purchase of securities. It is the hope of our financial leaders that they may be educated to become buyers of other sound issues, particularly the obligations of foreign countries which will be sent here to be placed in order to establish credits for the purchase of our raw materials and manufactured goods.

Stock Exchange transactions will grow in volume for three reasons —the increase in the number of persons who will become interested in the security markets, the inevitable increase in domestic listings, thus bringing new interests to our financial district, and last but probably not least, the foreign securities which will seek a market here. One force will react upon another. Securities will be listed here because of the broad market that can be established in New York, and buyers and sellers will send orders here from all over the world because of the wide choice afforded the investor.

CHAPTER XXXI

WALL STREET AND THE WORLD MARKET

The American business public is none too familiar with the part which Wall Street, considered as a national money-credit center, plays in the commercial, financial and maritime relations of the United States. For this nexus of economic service is an essential portion of the mechanism whereby the exchanges of the world powers are effected. In brief, there are three fundamental functions which Wall Street performs in its relations with the rest of the world. First, it performs the highly specialized financial function in the economic life of the metropolitan community of Greater New York; second, it is a focal center into and from which radiate on a national scale the currents of finance, industry and commerce, connecting it vitally with every community of the nation; and, third, it is the country's main international gateway for the import and export trade, for travel and migration to and fro, for foreign finance, for maritime enterprise in our external relations and for communication by cable with the rest of the world. As a result Wall Street cannot help being much more international in its viewpoints than other portions of the country. Consequently, also, foreign events influence its thought and action far more directly than is the case with any other community. Likewise, too, its attitudes on many questions of public interest, be they municipal or national, domestic or foreign, are determined to no small extent by its cosmopolitan position arising from its intercourse and connections on a world-wide scale.

As a financial center this market does far more than meet the needs of a great manufacturing and mercantile community. It is to it that corporations resort for most of the bond and stock financing for domestic and foreign companies in which American capital is directly interested. This alone involves a large commitment of financial resources, measured by the annual issues of new capital. That amounted within quite recent years to an average of $1,244,000,000 a year in new capital issues alone, on the New York Exchange in both stocks and bonds. Among the nations this one now seems to have become an objective for nearly all other countries for public and corporate loans. Of the former the 8 per cent. loan of $25,000,000 to the Swiss Government to finance its hydro-electric power resources in 1920 was an example. Further, the more onerous public debts of other countries hinder them from depending for the time being more fully on their own resources, and make the increased wealth of the United States the object of international competition as a lending nation.

No doubt the relations of the United States in general and Wall Street in particular to the external world were deeply influenced by the World War. One of the effects to be noted was to greatly widen the market for foreign securities. Prior to 1914 it would have been impossible to find such a paragraph of current comment as the following based on a list of 30 different issues, representing 12 different countries, and a score or more of different foreign cities in total listings running as high as $3,720,000,000 on the New York Stock Exchange (1920):

FOREIGN GOVERNMENT LOANS

Heavy trading and firmness in Anglo-French 5s was again the feature of foreign government bonds. These bonds sold at the high price of the year, following the announcement from London

that the government had already paid one-half of this loan and the balance would be paid by the time the bonds mature, October 15, next. City of Paris 6s continued to sell around 92. Japanese issues did not change trend and sales were comparatively light. Chinese Government 5s lost ½ at 42¼. Ever since the Chinese Government failed to pay interest on that part of these bonds which were German stamped, the bonds have made a poor showing in the New York market.

This is also the Western continent's exchange market. It is Wall Street's position as a world-wide news center, among other factors, that gives the New York market a special advantage as an exchange focus. The big bond houses and the banks, in one relation or another, are all interested in what happens in any country in which they represent the investing or speculative public. Economic prosperity or adversity, political changes, or developments in foreign relations all have a financial bearing if they influence the capacity of the people to follow their pursuits on which the discharge of international contracts depends. For commercial credits depend on the even tenor of transportation by land and sea to make good the acceptance or credit instrument for which the exporter receives cash as soon as he releases his shipment from the local siding in the interior. A vast majority of all the export and import bills are drawn on New York banks, as that port is headquarters for all the rest of the outer world, as well as for most of the domestic end of foreign trade. What the rates of foreign exchange are depends on what is known of foreign conditions as a whole, as well as what the financial and commercial situation may be here or in any particular country. Consequently, as a news focus New York's financial district reflects conditions in every important part of the foreign trade world—conditions which go far to decide what rate of exchange the exporter can

get for his draft on his customer on the other side of the globe.

Finally, it is as a market for gold that the Street figures more prominently than ever. Not only has this country become the main free gold market of the world, for the time being at least; but our reserves have become the greatest in our history. This is only in part due to the fact that other nations owe the United States approximately $10,000,000,000 as the measure of our advances in wartime loans; it is to a large extent the result of our capacity to supply them with the raw materials of industry and the foodstuffs of trade. This capacity gives the nation's main money market an advantage of a permanent character, so long as we produce a surplus of cotton, of copper, of silver, of petroleum, of food supplies, etc. Most of the great marketing agencies are located in this financial center, for obvious reasons. But the countries which sell to other nations, quite as well as those which buy from us, may do their financing through the banks of New York. As a result most of our gold and silver movements, as related to the world's trade and financing, pivot on the New York money market. Hence, not the least of this financial center's functions is to act as a base through which any two other countries may do their financing of their trade or fiscal obligations. Since the war, in the international readjustment of universal scope, there has been so much of this as to mislead some observers, who associate our enormous trade balance with immunity from export of gold. On this point we can hardly do better than to quote the Federal Reserve Board, by way of illustrating America's relation to the world market. This is reflected in the gold movements which hinge on our financial position and on New York's maritime facilities for serving the other nations in balancing credits. Of this service the Board says: "It is not to be expected

that the volume of our gold exports should correspond to the trade balance between ourselves and any given country, even if the 'invisible balance' be left out of account. This invisible balance, representing services, interest payments, and the like, is itself an important factor in the situation. The lack of correspondence in exports and imports is a frequent phenomenon in foreign exchange, and grows out of a fact that a third country may be in debt to a nation to which we are sending gold and may have drawn upon us under credits established here for the purpose of paying its debts through gold exportations. Conditions of this kind are especially likely to occur under present circumstances, due to the fact that the United States being practically the only free gold market in the world, many transfers and shifts of balances and cash are often made for the purpose of effecting international settlements, while the United States and its banks are employed as a base for these operations."[1]

Gold Policy of the United States.—One result of the recent war has been to gather into the United States a much larger stock of gold than the country needs to support its currency on the specie basis, and far more than the requirements of international trade can employ for settlement of balances. What, under the circumstances, is the wiser policy to pursue? Shall the gold thus accumulated here, be held, so to speak, in dead storage, or shall utilization be found for it in meeting the numerous international services to which the stocks of this money metal could be put?

One answer to this enigma is that of lending the gold to the work of rehabilitating the currency systems of the various countries in which war has driven them off the specie basis. This suggestion has a great deal in its favor.

[1] *Federal Reserve Board Bulletin,* Washington, March, 1920, p. 219.

It would put the surplus metal to use. It is an urgently needed service which probably no other country in the world is in position to render the financially weaker countries. It would certainly contribute directly to the restoration of the internal credits and the international exchanges to something like normal bases of values, and thus immensely advantage the United States, whose exporting is greatly handicapped by the low exchange rates with other countries of the world. A redistribution of the world's stock of gold is regarded by the best authorities as sooner or later inevitable, as a means of normalizing international exchange rates. Wiser still is the foresight that would prevent the United States from draining physically out of the world market what gold is left there, only later to return it when it becomes a drug on the market in our own vaults. The Brussels Conference on international finance proposed the pooling of the gold resources in some sort of international clearing-house organization, as a means of accomplishing a somewhat similar result. Meanwhile, the enormous borrowings in America of foreign cities, states and corporations tend to intensify the gold distribution problem, and check our investment activities in other lands.

The Stock Market as Business Barometer.—Neither gold movements alone, nor any other single criterion, are an adequate index of business conditions, either past, present or prospective. The business world, however, insists on having some means of exercising its powers of prevision, and has accordingly found in the movements of the stock market price averages some such criteria. As a barometer of business the monthly variations of certain factors are found as a matter of fact to anticipate by some months the corresponding turns in stock prices. This is well established by the inquiries of the Harvard Society of Economic Research.[2] It remains to be ascertained whether any given

[2] The New York *Annalist*, pp. 34-35, January 5, 1920

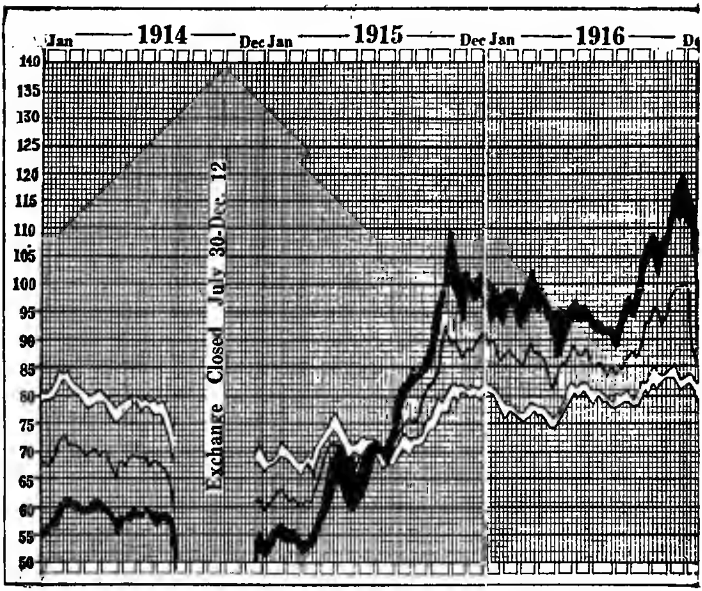
trend in an index of values is of a permanent or temporary character. By means of a five-factor index group (combining prices, production, bank clearings and interest rate units) it has been made evident that the index group movement so accurately forecasted the movements of a typical group of investment stocks as to foreshadow the rises, turns and recessions of the stock market. This method has not only the advantage of forecasting the trends but also enables the rate of movement to be calculated as to whether it is developing rapidly, slowly or at a normal rate.

The results of these researches into the stock market are usually expressed in some form of graphic chart whose import the eye can grasp at a glance. Such an exhibit is given on pages 426, 427 for a period of six years from 1914 to 1919 inclusive. This chart covers in profile the trends of the New York Stock Market Average Prices during this eventful era of peace, war and reconstruction down to the end of 1919, as taken in adapted form from the New York *Annalist* of January 5, 1920.

Explanations of the 1914-1919 Price Chart.—Of the three irregular lines here plotted, the *thin black line* shows the movement of the closing average prices of fifty stocks (25 industrials and 25 railway stocks) quoted on the New York Stock Exchange for the periods indicated at the top of the diagram. At the sides are given the average prices in dollars per share, ranging from \$50 at the bottom to \$140 at the top. This line started on January 1, 1914, at a price between \$65 and \$70 a share on the average, rose to \$100 a share near the end of 1916; between that date and the end of 1917 it dropped to the low of the period at \$60, and from that bottom level recovered and advanced by the end of 1919 to between \$90 and \$95.

The *heavy black line* has an added purpose; it not only shows the main trend of twenty-five industrial stocks, but by its varying widths indicates the highest and lowest aver-

age price of these stocks. The main trends are in general coincident with the fifty stocks, of which half were railroad and half industrial stocks, but with this difference, that they occupy a much higher range of average values than the thin black line indicated. Several of the most remarkable swings in industrial stock values are recorded between



From the *Annalist*, January 5, 1920.

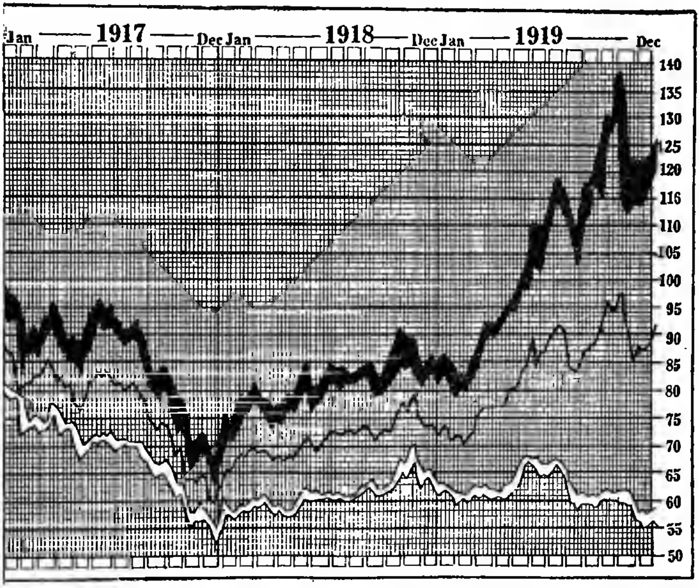
STOCK MARKET AVERAGE PRICES, BY MONTHS, 1914-1919

(Rails, white line; industrials, heavy black line; combined average, light black line.)

December, 1914, when the New York Stock Exchange reopened, and the latter part of 1915, 1916 and 1919. In these movements the different factors of war profits for European supply, of the expansion of industries for war contract operations, of the depression following the advent of the United States into the war in April, 1917, and the

enormous inflation of values during 1918 and 1919 are all depicted in profile.

The *broad white line* shows the movement of the average quotations (highest and lowest in width of line) for twenty-five railroad stocks. This was during a period when railway values were adversely affected, as compared with in-



From the *Annalist*, January 5, 1920.

Stock Market Average Prices, by Months, 1914-1919

(Rails, white line; industrials, heavy black line; combined average, light black line.)

dustrials. In this time there was much liquidation of rails in favor of the larger dividends of the industrials. In December, 1914, railroad stock values averaged much above industrials—approximately $15 a share higher. About the middle of 1915 the two crossed each other's path on the $70 level of price average. Since then rails have averaged

below industrials. In fact, beginning with the autumn of 1918, the general trend of rails was toward lower averages from $70, in November, 1918, to an average of $55 (low) in December, 1919. Average bond prices in these years kept remarkably close to the trend of railway stocks.

World-wide Readjustment.—After any prolonged period of price advances, such as the country and the world experienced from the initial upward movement of 1896, it is no more than natural that a reverse trend in values and prices of commodities should have to be reckoned with. In due time international trade movements of the major kinds must establish some sort of world-market price-levels, thereby tending to afford a more stable basis for financial enterprise and investment as well as for speculation, than the more recent past has afforded. The forces that tend to prevent any too sudden or too extensive a drift in a lower direction are to be found in the rising productive energies of the nations returning to the tasks of peace. In these tendencies and counter-tendencies we may look for stabilizing influences affecting prices, wages, credit and capital values. In the assemblage and distribution of the credit and capital resources the Western Continent may undoubtedly be expected to play a larger rôle; the United States must figure more extensively in the world's financing, and the services of Wall Street be regarded as more indispensable than ever in facilitating the world-wide adjustment of the nations to the newer order of economic life. This will be done more or less acceptably, according to the extent to which those responsible for this service acquire intelligent and thorough mastery of the facts and forces which determine the relations of Wall Street. The first of these responsible relations is with this great commercial, industrial and financial community comprising the ports and cities in "Greater New York"; the second is with the country itself, with most of whose internal development the

Street is directly identified; and, thirdly, with the international field whose future is fuller than ever of appealing problems and possibilities.

REFERENCES

The Statistical Service of the Harvard University Committee on Economic Research, November, 1920, contains a comparative exhibit, showing the relations graphically between the threefold tendencies of (*a*) Speculation, (*b*) Business (clearings and prices), and (*c*) Banking (credit rates), from 1903 to October, 1920, inclusive. In this connection, students of the subject should refer to Theodore E. Burton's "A Century of Prices," 1919.

INDEX